```
Welcome to STN International! Enter x:x
LOGINID: ssptayvv1621
PASSWORD:
LOGINID/PASSWORD REJECTED
The loginid and/or password sent to STN were invalid.
You either typed them incorrectly, or line noise may
have corrupted them.
Do you wish to retry the logon?
Enter choice (y/N):
Do you wish to use the same loginid and password?
Enter choice (y/N):
Enter new loginid (or press [Enter] for ssptavvv1621):
Enter new password:
LOGINID:
LOGINID: ssptayvv1621
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2
* * * * * * * * * * Welcome to STN International
                                                    * * * * * * * * * *
 NEWS
                  Web Page for STN Seminar Schedule - N. America
 NEWS 2 AUG 10
                 Time limit for inactive STN sessions doubles to 40
                  minutes
NEWS 3 AUG 18 COMPENDEX indexing changed for the Corporate Source
                  (CS) field
 NEWS 4 AUG 24 ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced
         AUG 24 CA/CAplus enhanced with legal status information for
                  U.S. patents
                 50 Millionth Unique Chemical Substance Recorded in
 NEWS 6 SEP 09
                  CAS REGISTRY
 NEWS 7 SEP 11 WPIDS, WPINDEX, and WPIX now include Japanese FTERM
                  thesaurus
 NEWS 8 OCT 21 Derwent World Patents Index Coverage of Indian and
                  Taiwanese Content Expanded
 NEWS 9 OCT 21 Derwent World Patents Index enhanced with human
                  translated claims for Chinese Applications and
                  Utility Models
NEWS 10 OCT 27 Free display of legal status information in CA/CAplus,
                  USPATFULL, and USPAT2 in the month of November.
 NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4,
             AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.
 NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
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Welcome Banner and News Items

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=> [[n]

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#### L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11 SAMPLE SEARCH INITIATED 16:22:16 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 15992 TO ITERATE

12.5% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*
PROJECTED ITERATIONS: 312264 TO 3274

 PROJECTED ITERATIONS:
 312264 TO
 327416

 PROJECTED ANSWERS:
 544 TO
 1374

L2 6 SEA SSS SAM L1

=> s 11 full

FULL SCREEN SEARCH COMPLETED - 320315 TO ITERATE

93.3% PROCESSED 298704 ITERATIONS 1172 ANSWERS

6 ANSWERS

1172 ANSWERS

100.0% PROCESSED 320315 ITERATIONS SEARCH TIME: 00.00.23

L3 1172 SEA SSS FUL L1

=> d scan 13

.3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN IN INDEX NAME NOT YET ASSIGNED

IN INDEX NAME NOT YET ASSIGNANT OF THE STATE OF THE STATE

MF C38 H64 N8 O15 S

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

Absolute stereochemistry.

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):20

- L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN Yessotoxin, 1, 4-di-O-desulfo-1, 4-O-[24-[3a8, 48,6aR)-hexahydro-2-oxo-lH-thieno[3, 4-d] imidazol-4-yl]-4, 20-dioxo-7, 10, 13, 16-tetraoxa-3, 19-diazatetracos-1-ylidene]-
- MF C79 H122 N4 O22 S

PAGE 1-A

$$\begin{array}{c} \text{CH}_2 & \text{OH} \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{C} - \text{CH} = \text{CH}_2 - \text{CH}_2 \\ \text{OH} & \text{CH}_2 \\ \text{OH} & \text{OH} \\ \text{OH} & \text{OH} \\ \end{array}$$

PAGE 2-A

CH2 CH2 NH C= 0 CH2 CH2 O CH2 CH2

PAGE 4-A

CI CCS

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

$$\begin{array}{c} \text{NH} \\ \text{H}_2\text{N}-\text{C}-\text{NH}-\text{(CH}_2\text{)} \\ \text{3} \\ \text{H} \\ \text{N} \\ \text{H} \\ \text{O} \\ \text{Ph}-\text{CH}_2 \\ \end{array} \\ \begin{array}{c} \text{O} \\ \text{H} \\ \text{O} \\ \text{Ph}-\text{CH}_2 \\ \end{array}$$

PAGE 2-A

●3 H+

$$\begin{array}{c} R_2^2 \\ (\text{CH}_2) \ 4 \\ \text{NH} \\ 0 \\ -\text{CH}_2 - \text{O} - \text{CH}_2 - \text{CH}$$

L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

IN L-Cysteine, N-[[[(1S)-1,3-dicarboxypropyl]amino]carbonyl]-L-γ-glutamyl-21-amino-4,7,10,13,16,19-hexaoxaheneicosanoyl-L-phenylalanyl-

SQL 4 MF C38 H59 N5 O18 S

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

Absolute stereochemistry.

PAGE 1-B

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN Xanthylium, 3,6-diamino-9-[2-carboxy-4(or 5)-[17-(2,6-dichlorophenoxy)-1,17-dioxo-5,8,11,14-tetraoxa-2-azaheptadec-l-yl]phenyl]-4,5-disulfo-, inner salt, compd. with N,N-diethylethanamine
- MF C38 H37 C12 N3 O16 S2 . 2 C6 H15 N

PAGE 1-A

$$\begin{array}{c} \texttt{C1} & \texttt{0} \\ \texttt{0} - \texttt{C} - \texttt{CH}_2 - \texttt{CH}_2 - \texttt{O} - \texttt{CH}_2 - \texttt{$$

PAGE 1-B

CM 2

Et | Et-N-Et

L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

IN INDEX NAME NOT YET ASSIGNED

SQL 9

MF C100 H164 Gd N20 O32

# \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

PAGE 1-B

NH || PAGE 2-B

C-NH-CH-(CH<sub>2</sub>)<sub>3</sub>-NH-C-NH<sub>2</sub>

O C-NH-CH-CH<sub>2</sub>-CO<sub>2</sub>
O C-NH-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>

PAGE 2-C

$$- \, \mathtt{CH}_2 - \mathtt{CH}_2 - \mathtt{O} - \, \mathtt{CH}_2 - \, \mathtt{CH}_2 - \, \mathtt{O} - \, \mathtt{CH}_2 - \, \mathtt{CH}_2 - \, \mathtt{O} - \, \mathtt{CH}_2 - \, \mathtt{CH}_2 - \, \mathtt{O} - \, \mathtt{CH}_2 - \, \mathtt{CH}_2 - \, \mathtt{O} - \, \mathtt{CH}_2 - \, \mathtt{CH}_2 - \, \mathtt{O} - \, \mathtt{CH}_2 - \, \mathtt{CH}_2 - \, \mathtt{O} - \, \mathtt{CH}_2 - \, \mathtt{CH}_2 - \, \mathtt{O} - \, \mathtt{CH}_2 - \, \mathtt{CH}_2 - \, \mathtt{O} - \, \mathtt{CH}_2 - \, \mathtt{CH}_2 - \, \mathtt{O} - \, \mathtt{CH}_2 -$$

PAGE 2-D

PAGE 2-E

L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

IN Cyclo (N-(14-carboxy-3,6,9,12-tetraoxatetradec-1-y1)-L-asparaginyl-L-valyl-L-prolylglycyl-N-(14-carboxy-3,6,9,12-tetraoxatetradec-1-y1)-L-asparaginyl-L-valyl-L-prolylglycyl]

SQL 8 MF C54 H90 N10 O22

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

PAGE 1-A

HO2C-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-O-CH2-O-

PAGE 1-B

PAGE 1-C

- O- CH2- CH2- О- CH2- CH2- CO2H

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN 4,7,10,13,16,19-Hexaoxatricosanedioic acid,
  21-amino-3-[[(18)-2-amino-2-oxo-1-(phenylmethyl)ethoxy]methyl]-9-(1H-indol-3-ylmethyl)-6,15-bis[2-(methylthio)ethyl]-18-[[4-(sulfooxy)phenyl]methyl], (35,65,98,195,185,218)-
- MF C49 H69 N3 O16 S3

Absolute stereochemistry.

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-(22-azido-15-oxo-3,6,9,12-tetraoxa-16-azadocos-1-y1)hexahydro-2-oxo-, (3a5,45,6aR)-
- MF C27 H49 N7 O7 S

### Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

- L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN 3,6,9,12,15,18,24-Heptaoxa-21-azahexacosanoic acid, 26,26',26'',26'''-[21H,23H-porphine-5,10,15,20-tetrayltetrakis(4,1-phenyleneimino)]tetrakis-
- MF C116 H158 N12 O44

PAGE 1-B

$${\tt HO_2C-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-}$$

PAGE 1-D

PAGE 2-A

$${\tt HO_2C-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-}$$

PAGE 2-B

PAGE 2-C

- L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN  $\alpha$ -D-Glucopyranoside, methyl 0-4-0-[(14S)-31-[3-[[(1S)-1-carboxy-2-[4-[4-(4-piperidinyl)] butoxy phenyl] ethyl] amino] sulfonyl] phenyl]-14-[4-[[5-[(3aS, 4S, 6aR)-hexahydro-2-oxo-1H-thieno] 3, 4-d] imidazol-4-yl]-1-oxopentyl] methylamino] butyl]-12-methyl-13, 16, 31-trioxo-3, 6, 9, 18, 21, 24, 27-heptaoxa-12, 15, 30-triazahentriacont-1-yl]-2, 3-di-0-methyl-6-0-sulfo- $\alpha$ -D-glucopyranosyl-(1-4)-0-2, 3-di-0-methyl-B-D
  - glucopyranuronosyl- $(1\rightarrow 4)$ -O-2,3,6-tri-O-sulfo- $\alpha$ -D-glucopyranosyl- $(1\rightarrow 4)$ -O-2,3-di-O-methyl- $\alpha$ -L-idopyranuronosyl-
- (1→4)-, 2,3,6-tris(hydrogen sulfate)
- MF C97 H156 N8 O66 S9
- CI COM

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN Glycine, L-y-glutamy1-S-[1-[(12S)-12-(aminocarbony1)-41-[(3aS, 4S, 6aR)-hexahydro-2-oxo-1H-thieno[3, 4-d]imidazo1-4-y1]-6,14,30,37tetraoxo-17,20,23,26-tetraoxa-7,13,29,36-tetraazahentetracont-1-y1]-2,5dioxo-3-pyrrolidiny1]-L-cysteiny1-
- MF C53 H89 N11 O18 S2

Absolute stereochemistry.

PAGE 1-A

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN 9,12,15,18-Tetraoxa-5,21-diazaheptatriacontanedioic acid,
  - 4-[(1,1-dimethylethoxy)carbonyl]-6,22-dioxo-, 37-(1,1-dimethylethyl)
- 1-(2,5-dioxo-1-pyrrolidinyl) ester, (4S)-

MF C44 H77 N3 O14

Absolute stereochemistry.

PAGE 1-B

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN 5,8,11,14,17,20-Hexaoxa-2-azatricosanedioic acid,
- $_{\rm 1-(9H-fluoren-9-ylmethyl)}$  ester MF  $_{\rm C30~H41~N~O10}$

HO2C-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-

PAGE 1-B

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN Benzo[1,2-b:4,3-b']dipyrrole-1-carboxylic acid, 8-(chloromethyl)-4-[[[2-[(21,21-dimethyl-3,19-dioxo-7,10,13,16,20-pentaoxa-4-azadocos-1-yl]dithio]phenyl]methylamino]carbonyl]oxy]-3,6,7,8-tetrahydro-6-[(5-methoxy-2-benzofuranyl)carbonyl]-2-methyl-, methyl ester, (85)-
- MF C50 H61 C1 N4 O14 S2

Absolute stereochemistry.

PAGE 1-A

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN L-Phenylalaninamide, N-[[(3R)-1-[1-oxo-3-(4-piperidinyl)propyl]-3-piperidinyl]carbonyl]-L-α-aspartyl-N-[16,16-dimethyl-14-oxo-3,6,9,12,15-pentaoxaheptdadec-1-yl)- (9CI)
- MF C41 H65 N5 O12

Absolute stereochemistry.

PAGE 1-B

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN Heptanedioic acid, 4-[3-(1,1-dimethylethoxy)-3-oxopropyl]-4-[[20-(1,2-dithiolan-3-yl)-1,16-dioxo-3,6,9,12-tetraoxa-15-azaeicos-1-yl]amino]-, 1,7-bis(1,1-dimethylethyl) ester
- MF C40 H72 N2 O12 S2

PAGE 1-B

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN Cyclo[L-arginylglycyl-L- $\alpha$ -aspartyl-D-phenylalanyl-N6-[N2-[3,5-bis(phosphonomethyl)benzoyl]-L-lysyl-L-lysyl-20-amino-3,6,9,12,15,18-hexaoxaeicosanoyl-20-amino-3,6,9,12,15,18-hexaoxaeicosanoyl]-L-lysyl] (9CI)
- SQL 9,5,4
- MF C76 H129 N15 O30 P2

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

Absolute stereochemistry.

PAGE 1-B

PAGE 1-D

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN 4,7,10,13-Tetraoxa-16-azaheneicosanoic acid, 21-[(3aS,48,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-17-oxo-, hydrazide
- MF C21 H39 N5 O7 S

Absolute stereochemistry.

PAGE 1-A

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN 5,8,11,14,17-Pentaoxa-2-azanonadecanedioic acid, 1-(9H-fluoren-9-ylmethyl) 19-(phenylmethyl) ester
- MF C34 H41 N O9

PAGE 1-A

PAGE 1-B

- \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*
- L3 1172 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN Cyclo[L-arginylq]vcyl-L- $\alpha$ -aspartyl-D-phenylalanyl-N-[(228)-22-carboxy-20,25-dioxo-29,1-4 (rtimethyl)tatanyl)phenyl]-3,6,9,12,15,18,27-heptaoxa-21,24,28-triazanonacos-28-en-l-yl]-L-glutaminyl] (9CI) SOL 5
- MF C55 H84 N12 O19 Sn
  - \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

Absolute stereochemistry. Double bond geometry unknown.

PAGE 1-B

PAGE 1-C

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s 5,8,11,14,17-Pentaoxa-2-azanonadecanedioic acid, 1-(9H-fluoren-9-ylmethyl)-19-(phenylmethyl) ester MISSING OPERATOR '1-(9H-FLUOREN'

=> s (5,8,11,14,17-Pentaoxa-2-azanonadecanedioic acid, 1-(9H-fluoren-9-ylmethyl)-19-(phenylmethyl) ester)

MISSING OPERATOR '1-(9H-FLUOREN'

=> s 5,8,11,14,17-Pentaoxa-2-azanonadecanedioic
acid,-1-(9H-fluoren-9-ylmethyl)-19-(phenylmethyl) ester
MISSING OPERATOR 'ACID,-1-(9H-FLUOREN'

=> 8

5, 8, 11, 14, 17 - Pentaoxa - 2 - azanona decane dioic-acid, -1 - (9 H-fluoren-9 - ylmethyl) - 19 - (phenylmethyl) - ester

MISSING OPERATOR 'C-ACID, -1-(9H-FLUOREN'

=> file caplus COST IN U.S. DOLLARS

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FULL ESTIMATED COST

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USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

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=> s 13 L4 449 L3 => s 13 not py > 2002 449 L3 9067286 PY > 2002 L5 82 L3 NOT PY > 2002

=> d 15 ibib abs hitstr 1-

YOU HAVE REQUESTED DATA FROM 82 ANSWERS - CONTINUE? Y/(N):n

L5 ANSWER 1 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:1199639 CAPLUS

TITLE: Long-Chain Alkylthiol Assemblies Containing Buried

In-Plane Stabilizing Architectures

Lee, Hung-Hsun; Ruzele, Zivile; Malysheva, Lyuba; AUTHOR(S): Onipko, Alexander; Gutes, Albert; Bjoerefors, Fredrik;

Valiokas, Ramunas; Liedberg, Bo

CORPORATE SOURCE: Division of Molecular Physics, Department of Physics,

Chemistry and Biology, Linkoeping University,

Linkoeping, 58183, Swed.

SOURCE: Langmuir ACS ASAP

CODEN: LANGD5; ISSN: 0743-7463 American Chemical Society

PUBLISHER: DOCUMENT TYPE: Journal

LANGUAGE: English

A series of alkylthiol compds, were synthesized to study the formation and structure of complex self-assembled monolayers (SAMs) consisting of interchanging structural modules stabilized by intermol. hydrogen bonds. The chemical structure of the synthesized compds.,

HS(CH2)15CONH(CH2CH2O)6CH2CONH-X, where X refers to the extended chains of either -(CH2)nCH3 or -(CD2)nCD3, with n = 0, 1, 7, 8, 15, was confirmed by

NMR and elemental anal. The formation of highly ordered,

methyl-terminated SAMs on gold from diluted ethanolic solns, of these compds. was revealed using contact angle goniometry, null ellipsometry, cyclic voltammetry, and IR reflection absorption spectroscopy. The exptl. work was complemented with extensive DFT modeling of IR spectra and mol. orientation. New assignments were introduced for both nondeuterated and deuterated compds. The latter set of compds. also served as a convenient tool to resolve the packing, conformation, and orientation of the buried and extended modules within the SAM. Thus, it was shown that the lower alkyl portion together with the hexa(ethylene glycol) portion is

stabilized by the two layers of lateral hydrogen bonding networks between the amide groups, and they provide a structurally robust support for the extended alkyls. The presented system can be considered to be an

extension of the well-known alkyl SAM platform, enabling precise engineering of nanoscopic architectures on the length scale from a few to .apprx.60 Å for applications such as cell membrane mimetics, mol.

nanolithog., and so forth. 1191245-67-6P 1191245-69-8P 1191245-71-2P

1191245-73-4P 1191245-75-6P 1191245-80-3P

1191245-78-9P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(S-deprotection; long-chain alkylthiol assemblies containing buried in-plane stabilizing architectures)

1191245-67-6 CAPLUS RN

Ethanethioic acid, S-(16,37-dioxo-20,23,26,29,32,35-hexaoxa-17,38-CN diazanonatriacont-1-vl) ester (CA INDEX NAME)

PAGE 1-A

MeNH C CH2 O CH2 C

PAGE 1-B

— 
$${\tt CH_2-CH_2-O-CH_2-CH_2-NH-C-(CH_2)_{15}-SAC}$$

RN 1191245-69-8 CAPLUS

CN Ethanethioic acid, S-(16,37-dioxo-20,23,26,29,32,35-hexaoxa-17,38-diazatetracont-1-y1) ester (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

$$-$$
 CH<sub>2</sub> $-$  CH<sub>2</sub> $-$  O $-$  CH<sub>2</sub> $-$  CH<sub>2</sub> $-$  NH $-$  C $-$  (CH<sub>2</sub>)<sub>15</sub> $-$  SAc

RN 1191245-71-2 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

PAGE 1-B

RN 1191245-73-4 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

PAGE 1-B

RN 1191245-75-6 CAPLUS CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

PAGE 1-B

 $\begin{array}{c} \text{O} \\ \text{H}_2 - \text{CH}_2 - \text{O} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{CH}_2 - \text{CH}_2 - \text{NH} - \text{C} - \text{(CH}_2)_{15} - \text{SAc} \end{array}$ 

RN 1191245-78-9 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

Me-(CH<sub>2</sub>)<sub>8</sub>-NH-C-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O-CH<sub>2</sub>-O

PAGE 1-B

RN 1191245-80-3 CAPLUS CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

D3C-(CD2)15-NH-C-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-

PAGE 1-B

— CH2-CH2-O-CH2-CH2-O-CH2-CH2-NH-C-(CH2)15-SAc

II 352439-49-7 RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent) (adsorbed on gold; cyclic voltammetry; long-chain alkylthiol assemblies containing buried in-plane stabilizing architectures)

RN 352439-49-7 CAPLUS

```
CN
   3,6,9,12,15,18-Hexaoxa-21-azaheptatriacontanamide,
    N-hexadecy1-37-mercapto-22-oxo- (CA INDEX NAME)
                                                           PAGE 1-A
    Me (CH2) 15 NH C CH2 O CH2 CH2 CH2 CH2 CH2 O CH2 CH2 O CH2 CH2 O
                                                           PAGE 1-B
- CH2- CH2- O- CH2- CH2- O- CH2- CH2- NH- C- (CH2) 15- SH
IT
    1191245-70-1P 1191245-74-5P
     RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT
     (Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC
     (Process); RACT (Reactant or reagent)
        (adsorbed on gold; cyclic voltammetry; long-chain alkylthiol assemblies
       containing buried in-plane stabilizing architectures)
     1191245-70-1 CAPLUS
CN
     5, 8, 11, 14, 17, 20-Hexaoxa-2-azadocosanamide,
     N-ethyl-1-(15-mercaptopentadecyl)-1-oxo- (CA INDEX NAME)
                                                           PAGE 1-A
   EtNH C CH2 O CH2 O CH2 O CH2 O CH2
                                                           PAGE 1-B
- CH2- CH2- O- CH2- CH2- NH- C- (CH2) 15- SH
RN
     1191245-74-5 CAPLUS
CN
     5,8,11,14,17,20-Hexaoxa-2-azadocosanamide,
     1-(15-mercaptopentadecyl)-N-octyl-1-oxo- (CA INDEX NAME)
                                                           PAGE 1-A
     Me- (CH2) 7-NH-C-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-
                                                           PAGE 1-B
```

- CH2-CH2-O-CH2-CH2-O-CH2-CH2-NH-C-(CH2)15-SH

```
1191245-68-7P 1191245-72-3P
                                   1191245-76-7P
     1191245-79-0P 1191245-81-4P
     RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN
     (Synthetic preparation); PREP (Preparation); PROC (Process)
        (adsorbed on gold; long-chain alkylthiol assemblies containing buried
        in-plane stabilizing architectures)
RN
     1191245-68-7 CAPLUS
CN
     INDEX NAME NOT YET ASSIGNED
                                                          PAGE 1-A
          - CH2- O- CH2- CH2- O- CH2- CH2- O- CH2- CH2- O- CH2- CH2- O-
                                                          PAGE 1-B
- CH2- CH2- O- CH2- CH2- NH- C- (CH2) 15- SH
     1191245-72-3 CAPLUS
CN
     INDEX NAME NOT YET ASSIGNED
                                                          PAGE 1-A
   D3C-CD2-NH-C-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-
                                                          PAGE 1-B
- CH2- O- CH2- CH2- O- CH2- CH2- NH- C- (CH2) 15- SH
     1191245-76-7 CAPLUS
RN
CN
     INDEX NAME NOT YET ASSIGNED
                                                          PAGE 1-A
    D3C- (CD2) 7-NH-C-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-
                                                          PAGE 1-B
```

- CH2-CH2-O-CH2-CH2-O-CH2-CH2-NH-C-(CH2)15-SH

RN 1191245-79-0 CAPLUS

CN 5,8,11,14,17,20-Hexaoxa-2-azadocosanamide,

1-(15-mercaptopentadecy1)-N-nony1-1-oxo- (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 1191245-81-4 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

PAGE 1-B

IT 352439-47-5

RL: RCT (Reactant); RACT (Reactant or reagent) (amidation; long-chain alkylthiol assemblies containing buried in-plane stabilizing architectures)

RN 352439-47-5 CAPLUS

CN 3,6,9,12,15,18-Hexaoxa-38-thia-21-azatetracontanoic acid, 22,39-dioxo-(CA INDEX NAME)

PAGE 1-A

PAGE 1-B

L5 ANSWER 2 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:808500 CAPLUS

DOCUMENT NUMBER: 138:34814

TITLE: Synthesis of the DNA-[Ru(tpv)(dppz)(CH3CN)]2+

conjugates and their photo cross-linking studies with

the complementary DNA strand

Ossipov, Dimitri; Gohil, Suresh; Chattopadhyaya, Jyoti AUTHOR(S): CORPORATE SOURCE: Biomedical Center, Department of Bioorganic Chemistry,

University of Uppsala, Uppsala, S-751 23, Swed.

Journal of the American Chemical Society (2002),

124(45), 13416-13433

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

SOURCE:

CASREACT 138:34814

OTHER SOURCE(S):

We here report our studies on the conjugation of photoreactive Ru2+ complex to oligonucleotides (ODNs), which give a stable duplex with the complementary target DNA strand. These functionalized DNA duplexes bearing photoreactive Ru2+ complex can be specifically photolyzed to give the reactive aqua derivative, [Ru(tpy)(dppz)(H2O)]2+-ODN (tpy = 2,2':6',2''-terpyridine; dppz = dipyrido[3,2-a:2',3'-c]phenazine), in situ, which successfully cross-links to give photoproduct(s) in the duplex form with the target complementary DNA strand. Thus, the stable precursor of the aquaruthenium complex, the monofunctional polypyridyl ruthenium complex [Ru(tpy)(dppz)(CH3CN)]2+, has been site-specifically tethered to ODN, for the first time, by both solid-phase synthesis and postsynthetic modifications. (i) In the first approach, pure 3'-[Ru(tpy)(dppz)(CH3CN)]2+-ODN conjugate has been obtained in 42% overall yield (from the monomer blocks) by the automated solid-phase synthesis on a support labeled with [Ru(tpy)(dppz)Cl]+ complex with subsequent liberation of the crude conjugate from the support under mild conditions and displacement of the C1- ligand by acetonitrile in the coordination sphere of the Ru2+ label. (ii) In the second approach, the single-modified (3'- or 5'- or middle-modified) or 3',5'-bis-modified Ru2+-ODN conjugates were prepared in 28-50% yield by an amide bond formation between an active ester of the metal complex and the ODNs conjugated with an amino linker. The pure conjugates were characterized unambiguously by UV-visible (UV-vis) absorption spectroscopy, enzymic digestion followed by HPLC quantitation, PAGE, and mass spectrometry (MALDI-TOF as well as by ESI). [Ru(tpv)(dppz)(CH3CN)]2+-ODNs form highly stabilized ODN.DNA duplexes compared to the unlabeled counterpart (ATm varies from 8.4 to 23.6°) as a result of intercalation of the dppz moiety; they undergo clean and selective photodissocn. of the CH3CN ligand to give the corresponding agua complex, [Ru(tpy)(dppz)(H2O)]2+-ODNs (in the aqueous medium), which is evidenced from the change of their UV-vis absorption properties and the detection of the naked Ru2+-ODN ions generated in the course of the matrix-assisted laser desorption ionization time-of-flight (MALDI-TOF) mass spectrometric anal. Thus, when [Ru(tpy)(dppz)(CH3CN)]2+-ODN conjugate was hybridized to the complementary quanine (G)-rich target strand (T), and photolyzed in a buffer (pH 6.8), the corresponding agua complex formed in situ immediately reacted with the G residue of the opposite strand, giving the cross-linked product. The highest yield (34%) of the photo cross-linked product obtained was with the ODN carrying two reactive Ru2+ centers at both 3'- and 5'-ends. For ODNs carrying only one Ru2+ complex, the yield of the cross-linked adduct in the corresponding duplex is found to decrease in the following order: 3'-Ru2+-ODN (22%) > 5'-Ru2+-ODN (9%) > middle-Ru2+-ODN (7%). It was also found that the photo cross-coupling efficiency of the tethered Ru2+ complex with the target T strand decreased as the stabilization of the

resulting duplex increased: 3'-Ru2+-ODN (VI·T) (ATmb =

 $7^{\circ}$ ) <  $5'-Ru2+-ODN (V \cdot T) (\Delta Tmb = 16^{\circ}) <$ 

middle-Ru2+-ODN (VII·T) (ATmb = 24.3°, Table 2). This shows that, with the rigidly packed structure, as in the duplex with middle-Ru2+-ODN, the metal center flexibility is considerably reduced, and consequently the accessibility of target G residue by the aquaruthenium moiety becomes severely restricted, which results in a poor yield in the cross-coupling reaction. The cross-linked product was characterized by PAGE, followed by MADII-TOP MS.

1T 478415-62-P 478819-57-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(DNA-[Ru(tpy)(dppz)(CH3CN)]2+ conjugates and their photo crosslinking studies with complementary DNA strand shows enhanced thermal and nuclease stability)

RN 478415-62-2 CAPLUS

CN 5,8,11,14-Tetraoxa-2-azaoctadecanedioic acid,

13-[bis(4-methoxyphenyl)phenylmethoxy]-15-oxo-, 1-(9H-fluoren-9-ylmethyl) ester (CA INDEX NAME)

PAGE 1-A

RN 478819-57-7 CAPLUS CN Ruthenium, chloro[m

Ruthenium, chloro[mono[2-[bis(4-methoxyphenyl)phenylmethoxy]-1-[12-(dipyrido[3,2-a:2',3'-c]phenazin-11-y1-xN4, xN5)-12-oxo-2,5,8-trioxa-11-azadodec-1-y1]ethyl] butanedioato](2,2':6',2''-terpyridine-xN1,xN1'')-, (OC-6-43)- (9C1) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

OS.CITING REF COUNT: 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS

RECORD (17 CITINGS)

REFERENCE COUNT: 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:798417 CAPLUS

DOCUMENT NUMBER: 138:250343

TITLE: Interactions of Inositol 1,4,5-Trisphosphate (IP3)
Receptors with Synthetic Poly(ethylene glycol)-linked
Dimers of IP3 Sudgest Close Soacing of the IP3-binding

Sites

AUTHOR(S): Riley, Andrew M.; Morris, Stephen A.; Nerou, Edmund P.; Correa, Vanessa; Potter, Barry V. L.; Taylor,

Colin W.

CORPORATE SOURCE: Department of Pharmacy and Pharmacology, Wolfson

Laboratory of Medicinal Chemistry, University of Bath,

Claverton Down, Bath, BA2 7AY, UK

SOURCE: Journal of Biological Chemistry (2002), 277(43),

40290-40295

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular

DOCUMENT TYPE: Biology
Journal
LANGUAGE: English

The distances between the inositol 1,4,5-trisphosphate (IP3)-binding sites of tetrameric IP3 receptors were probed using dimers of IP3 linked by poly(ethylene glycol) (PEG) mols. of differing lengths (1-8 nm). Each of the dimers potently stimulated 45Ca2+ release from permeabilized cells expressing predominantly type 1 (SH-SY5Y cells) or type 2 (hepatocytes) IP3 receptors. The shortest dimers, with PEG linkers of an effective length of 1.5 nm or less, were the most potent, being 3-4-fold more potent than IP3. In radioligand binding expts. using cerebellar membranes, the shortest dimers bound with highest affinity, although the longest dimer (8 nm) also bound with almost 4-fold greater affinity than IP3. The affinity of monomeric IP3 with only the PEG attached was 2-fold weaker than IP3, confirming that the increased affinity of the dimers requires the presence of both IP3 motifs. The increased affinity of the long dimer probably results from the linked IP3 mols. binding to sites on different receptors, because the dimer bound with greater affinity than IP3 to cerebellar membranes, where receptors are densely packed, but with the same affinity as IP3 to purified receptors. IP3 and the IP3 dimers, irresp. of their length, bound with similar affinity to a monomeric IP3-binding domain of the type 1 IP3 receptor expressed in bacteria. Short dimers therefore bind with increased affinity only when the receptor is tetrameric. We conclude that the four IP3-binding sites of an IP3 receptor may be separated by as little as 1.5 nm and are therefore likely to be placed centrally in this large (25 + 25 nm) structure, consistent with previous work indicating a close association between the central pore and the IP3-binding sites of the IP3 receptor.

IT 502159-31-1P

RL: BSU (Biological study, unclassified); PNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation)

(interactions of tetrameric IP3 receptors with synthetic PEG-linked dimers of IP3 suggest close spacing of IP3-binding sites)

RN 502159-31-1 CAPLUS

CN D-myo-Inositol, 2,2'-O-(4,41-dioxo-6,9,12,15,18,21,24,27,30,33,36,39-dodecaoxa-3,42-diazatetratetracontane-1,44-diyl)bis-,1,1',4,4',5,5'-hexakis(dihydrogen phosphate) (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 1-C

OS.CITING REF COUNT: 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS

RECORD (21 CITINGS) REFERENCE COUNT: THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2002:717763 CAPLUS

DOCUMENT NUMBER: 138:39852

TITLE: Water-soluble polymers with tunable temperature

sensitivity: solution behavior

AUTHOR(S): Rackaitis, M.; Strawhecker, K.; Manias, E. CORPORATE SOURCE:

Department of Materials Science & Engineering, The Pennsylvania State University, University Park, PA,

16802, USA

SOURCE: Journal of Polymer Science, Part B: Polymer Physics

(2002), 40(19), 2339-2342 CODEN: JPBPEM; ISSN: 0887-6266

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

To design water-soluble polymers with a controlled temperature response in aqueous

solns. and to tailor their phase separation through the balance of hydrophilic and hydrophobic segments, a series of polyesters and polyamides on the basis of monomers with a controlled stoichiometry of ethylene/(ethylene oxide) (EO) were prepared Cloud point measurements were carried out to study phase separation behavior of polymers in aqueous solution The polymers

obey a

linear dependence of the transition temperature on the monomeric hydrophobic/hydrophilic balance. By tailoring the monomer stoichiometry (using short EO and ethylene units connected by ester or amide groups), transition temps. from  $7\text{--}70^\circ$  in water at ambient pressures were achieved.

IT 478551-48-3 478551-51-8

RL: PRP (Properties)
(solution behavior and phase separation of water-soluble polymers with tunable

temperature sensitivity)

RN 478551-48-3 CAPLUS

CN Poly[oxy-1,2-ethanediyloxy-

PAGE 1-A

PAGE 1-B

RN 478551-51-8 CAPLUS

CN Poly[oxy-1, 2-ethanediyloxy-1, 2-ethanediyloxy-1, 2-ethanediyloxy-1, 2-ethanediyloxy-1, 2-ethanediyloxy(2-oxo-1, 2-ethanediyl) xmino-1, 4-cyclohexanediylimethylene-1, 4-cyclohexanediylimino(1-oxo-1, 2-ethanediyl) (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS

RECORD (15 CITINGS)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:708816 CAPLUS

DOCUMENT NUMBER: 137:247925

TITLE: Preparation of peptide nucleic acid (PNA) containing

fluorescence and/or biotin-labeled puromycin

derivatives as their use for C-terminus monomolecular

labeling of proteins

INVENTOR(S): Sasaki, Akira; Nemoto, Naoto

PATENT ASSIGNEE(S): Gencom Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002265492	A	20020918	JP 2001-65257	20010308
PRIORITY APPLN. INFO.:			JP 2001-65257	20010308
OTHER SOURCE(S):	MARPAT	137:247925		

GI

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AB Puromycin derivs. [I; R = R1-L1-, X-L3-L2-L1-, wherein L1, L3, L1-L8-L7-L6-CH(-L5-L9-L10-L11-L12-L13-X2)-L4-L3-L2-L1-; wherein L1, L3, L6, L9, L11, L13 = a spacer; L2, L4, L5, L7, L10, L12 = a linkage group; R1 = a reactive group; Nu = pyrimidine or purine base residue such as cytosine; X1, X2 = a residue of a labeling substance such as a fluorescence substance] are prepared Also disclosed are protein or nucleic acid or derivative thereof containing the compound I or its salt as the constituent

component. Claimed is a method for preparation of modified protein or nucleic acid involving a process of allowing the compound I or its salt to be taken up into the protein or nucleic acid. The present patent establishes the efficient synthesis of puromycin derivs. which are used to efficiently label protein at the C-terminus, and a method for forming a complex of nucleic acid and a protein coded by the nucleic acid using the puromycin derivs. A protein introduced with the puromycin derivative I is typically prepared by introducing RNA (preferably mRNA) coding the protein and the puromycin derivative I into a transcription system and transcribing RNA into protein. Thus, N-trifluoroacetylation of puromycin by trifluoroacetic anhydride in pyridine/MeCN followed by tosylation with tosyl chloride in pyridine gave Nα-trifluoroacetyl-5'-0-tosyl puromycin which underwent azidolysis with NaN3 in DMSO at room temperature for 3 days to give  $N\alpha$ -trifluoroacetyl-5'-azido-5'-deoxy puromycin (II). Reduction of II to Nα-trifluoroacetyl-5'-amino-5'-deoxy puromycin by treatment with Ph3P and H2O in pyridine followed by condensation with N-[2-(4-methoxytritylamino)ethyl]-N-[[N4-(4-tert-butylbenzoyl)cytosin-1yl]acetyl]glycine pentafluorophenyl ester in 0.15 M NaHCO3/Na2CO3 buffer and deprotection with NH3 in aqueous EtOH and then with CF3CO2H gave I (R = H2N-CH2CH2, Nu = cytosin-1-yl) which was condensed with FluoroLink Mono Reactive Dye Cy5 to give I (R = Q) (Cy5-C-amPu). MRNA coding green fluorescein protein (GFP) (1 µg) and 10 µM I (R = Q) were added to

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

50  $\mu$ L of a wheat germ noncellular translation system (Promega) and allowed to react for 1 h. It was confirmed by separation of the protein using SDS-polyacrylamide electrophoresis and detecting the both fluorescein from I (R = 0) and GPF that the GPF synthesized was labeled by I (R = 0).

IT 459426-24-5P

RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of peptide nucleic acid (PNA) containing fluorescence and/or biotin-labeled purowycin derivs. as use for C-terminus monomol. labeling of proteins and nucleic acids by translation of RNA into proteins

N 459426-24-5 CAPLUS

CN Adenosine, 3'-[[(2S)-2-amino-3-(4-methoxyphenyl)-1-oxopropyl]amino]-5'[[[(4-amino-2-oxo-1(2H)-pyrimidinyl)acetyl][2-[[N-[21-[(3aS, 4s, 6aR)hexahydro-2-oxo-1H-thieno[3, 4-d] midazol-4-yl]-1,17-dioxo-4,7,10,13tetraoxa-16-azahensicos-1-yl]-β-alanyl-N6-[6-[2-[(1E,3E,5E)-5-(1ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1,3pentadienyl]-3,3-dimethyl-5-sulfo-3H-indolio]-1-oxohexyl]-L-lysyl-βalanyl]amino]ethyl]amino]acetyl]amino]-3',5'-dideoxy-N,N-dimethyl-, inner
salt (9C1) (CA INDEX NANE)

Absolute stereochemistry. Double bond geometry as shown.

PAGE 1-A

PAGE 1-C

- IT 459426-22-3, (+)-Biotin-PEO4-NHS-propionate
  - RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of peptide nucleic acid (PNA) containing fluorescence and/or biotin-labeled puromycin derivs. as use for C-terminus monomol. labeling of proteins and nucleic acids by translation of RNA into

- proteins) RN 459426-22-3 CAPLUS
- 10720 CMT00 4,7,10,13-Tetraoxa-16-azaheneicosanoic acid, 21-[(3a5,48,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-17-oxo-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

- IT 459426-23-4P 459426-25-6P
  - RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of pertide nucleic acid (PNA) containing fluorescence and/or

(preparation or peptide nucleic acid (PMA) containing rluorescence and/or biotin-labeled puromycin derive, as use for C-terminus monomol. labeling of proteins and nucleic acids by translation of RNA into proteins)

- RN 459426-23-4 CAPLUS
- CN Adenosine, 3'-[[(2S)-2-amino-3-(4-methoxyphenyl)-1-oxopropyl]amino]-5'-[[[(4-amino-2-oxo-1(2H)-pyrimidinyl)acetyl][2-[[N-[21-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazo1-4-yl]-1,17-dioxo-4,7,10,13-tetraoxa-16-azaheneicos-1-yl]-β-alanyl-L-1ysyl-β-alanyl]mino]ethyl]amino]ethylamino]et

PAGE 1-B

RN 459426-25-6 CAPLUS

CN Adenosine, 3'-[[(28)-2-amino-3-(4-methoxyphenyl)-1-oxopropyl]amino]-5'[[((4-amino-2-oxo-1(2H)-pyrimidinyl)acetyl][2-[[N-[21-[(385,48,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazo1-4-yl]-1,17-dioxo-4,7,10,13tetraoxa-16-azaheneicos-1-yl]-B-alanyl-N6-[(1,1dimethylethoxyl)carbonyl]-1-lysyl-Balanyl]amino]ethyl]amino]acetyl]amino]-3',5'-dideoxy-N,N-dimethyl(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-C

OS.CITING REF COUNT: THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD 1 (1 CITINGS)

L5 ANSWER 6 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2002:323803 CAPLUS

DOCUMENT NUMBER: 137:95544

TITLE:

Surface activities of disodium polyoxyalkylene fatty acid monoethanolamide sulfosuccinates

Wu, Jin-Chuan; Zhuang, Yan; Tu, Yu-En AUTHOR(S): Chemical Engineering Research Center, Tianjin CORPORATE SOURCE:

University, Tianjin, 300072, Peop. Rep. China SOURCE: Tenside, Surfactants, Detergents (2002), 39(1), 39-41

CODEN: TSDEES; ISSN: 0932-3414

PUBLISHER: Carl Hanser Verlag DOCUMENT TYPE:

Journal LANGUAGE: English AB Disodium polyoxyethylene (POE) and polyoxypropylene (POP) fatty acid (C12 and C14) monoethanolamide sulfosuccinates were prepared and some of their surface activities were investigated. With increase in the polymerization

(m) of the oxyalkylene groups or in the number of carbon atoms (n) in the alkyl group of the fatty acids, the critical micelle concentration (c.m.c.) decreased and the surface tension at c.m.c. (yc.m.c.) increased.

The wetting power of the POE type was sharply reduced with increase in m while that of the POP type was slightly enhanced. The foaming capacity of both POE and POP types decreased with increase of m or n while their foam stability was less affected. The c.m.c. of the POE type was higher than that of the POP type at the same n and m values, while the yc.m.c. of the former was lower than that of the latter. The wetting power of the former was inferior to that of the latter, while their difference in foam

properties was insignificant. 1 441778-79-6 441778-80-9 441778-82-1 441778-83-2 442155-93-3 442155-94-4 442155-95-5 442155-97-7 442155-98-8 442155-99-9

RL: PRP (Properties)

(surface activities of disodium polyoxyalkylene fatty acid monoethanolamide sulfosuccinates)

RN 441778-79-6 CAPLUS

CN Butanedioic acid, sulfo-, 4-(19-oxo-3,6,9,12,15-pentaoxa-18-azatriacont-1-yl) ester, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

●2 Na

PAGE 1-B

- O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-NH-C-(CH<sub>2</sub>)<sub>10</sub>-Me

RN 441778-80-9 CAPLUS

CN Butanedioic acid, 2-sulfo-, 4-(34-oxo-3,6,9,12,15,18,21,24,27,30-decaoxa-33-azapentatetracont-1-yl) ester, sodium salt (1:2) (CA INDEX NAME)

PAGE 1-A

 PAGE 1-C

- CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-NH-C-(CH<sub>2</sub>)<sub>10</sub>-Me

RN 441778-82-1 CAPLUS
CN Butanedioic acid, sulfo-, 4-(19-oxo-3,6,9,12,15-pentaoxa-18-azadotriacont-1-yl) ester, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

•2 Na

PAGE 1-B

 $- \circ - \circ \mathsf{CH}_2 - \circ \mathsf{CH}_2 - \circ - \circ \mathsf{CH}_2 - \circ \mathsf{CH}_2 - \mathsf{NH} - \mathsf{C} - (\mathsf{CH}_2)_{12} - \mathsf{Me}$ 

RN 441778-83-2 CAPLUS
Watanedioic acid, 2-sulfo-, 4-(34-oxo-3,6,9,12,15,18,21,24,27,30-decaoxa-33-azaheptatetracont-1-y1) ester, sodium salt (1:2) (CA INDEX NAME)

PAGE 1-A

●2 Na

PAGE 1-B

PAGE 1-C

RN 442155-93-3 CAPLUS

CN Butanedioic acid, sulfo-, 4-(pentamethyl-19-oxo-3,6,9,12,15-pentaoxa-18-azatriacont-1-yl) ester, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

5 (D1-Me)

●2 Na

PAGE 1-B

- O- CH<sub>2</sub>- CH<sub>2</sub>- O- CH<sub>2</sub>- CH<sub>2</sub>- NH- C- (CH<sub>2</sub>)<sub>10</sub>- Ме

RN 442155-94-4 CAPLUS

CN Butanedioic acid, sulfo-, 4-(octamethy1-28-oxo-3,6,9,12,15,18,21,24-octaoxa-27-azanonatriacont-1-yl) ester, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

8 (D1-Me)

●2 Na

PAGE 1-B

RN 442155-95-5 CAPLUS

CN Butanedioic acid, sulfo-, 4-(decamethyl-34-oxo-3,6,9,12,15,18,21,24,27,30-decaoxa-33-azapentatetracont-1-yl) ester, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

10 ( D1-Me )

●2 Na

PAGE 1-B

PAGE 1-C

$$\begin{array}{c} \text{O} \\ \parallel \\ -\text{CH}_2-\text{CH}_2-\text{O-CH}_2-\text{CH}_2-\text{NH-C-(CH}_2)_{10}-\text{Me} \end{array}$$

RN 442155-97-7 CAPLUS

CN Butanedioic acid, sulfo-, 4-(pentamethyl-19-oxo-3,6,9,12,15-pentaoxa-18-azadotriacont-1-yl) ester, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

5 (D1-Me)

$$\begin{array}{c} \text{O} \\ \parallel \\ -\text{O-CH}_2\text{-CH}_2\text{-O-CH}_2\text{-CH}_2\text{-NH-C-(CH}_2)_{12}\text{-Me} \end{array}$$

RN 442155-98-8 CAPLUS

CN Butanedioic acid, sulfo-, 4-(octamethyl-28-oxo-3,6,9,12,15,18,21,24-octaoxa-27-azahentetracont-1-yl) ester, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

8 (D1-Me)

●2 Na

PAGE 1-B

PAGE 1-C

RN 442155-99-9 CAPLUS

CN Butanedioic acid, sulfo-, 4-(decamethyl-34-oxo-3,6,9,12,15,18,21,24,27,30-decaoxa-33-azaheptatetracont-1-yl) ester, disodium salt (9CI) (CA INDEX NAME)

SO3H 0 | HO2C CH-CH2-C-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-O-CH2-CH2-O-C

10 (D1-Me)

●2 Na

PAGE 1-B

PAGE 1-C

 $\begin{array}{c} & \circ \\ | \\ - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{CH}_2 - \text{CH}_2 - \text{NH} - \text{C} - (\text{CH}_2)_{12} - \text{Me} \end{array}$ 

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(3 CITINGS)
REFERENCE COUNT: 6 THERE ARE 6

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:266161 CAPLUS

DOCUMENT NUMBER: 137:29586

TITLE: Replacement of the intervening amino acid sequence of a Syk-binding diphosphopeptide by a nonpeptide spacer

with preservation of high affinity

AUTHOR(S): Dekker, Frank J.; de Mol, Nico J.; van Ameijde,

Jeroen; Fischer, Marcel J. E.; Ruijtenbeek, Rob;

Redegeld, Frank A. M.; Liskamp, Rob M. J.

Department of Medicinal Chemistry Utrecht Institute of

Pharmaceutical Sciences, Utrecht University, Utrecht, 3508 TB, Neth.

SOURCE: ChemBioChem (2002), 3(2-3), 238-242

CODEN: CBCHFX; ISSN: 1439-4227

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

CORPORATE SOURCE:

AB A high-affinity compound was constructed by linking two relatively weakly interacting monophosphorylated peptides by an oligoethylene glycol spacer. To prepare the required spacers, hexa- and tetraethylene glycol were converted into amino acid superstructures.

Benzotriazol-1-yloxy-tris (dimethylamino)-phosphonium hexafluorophosphate,

Benzotriazol-1-yloxy-tris(dimethylamino)-phosphonium hexafluorophosphate, N,N-diisopropylethylamine, and 9-fluorenylmethyloxycarbonyl amino acids were used for the couplings. The tandem Src homol-2-G (SB2) domain of murine Syk was cloned, expressed, and purified to determine the affinity of the phosphopeptides and the phosphopeptide hybrids for the Syk tandem SH2 domain. In the surface plasmon resonance (SPR) assay, the peptide

featuring the immunoreceptor tyrosine-based activation motif sequence was extended with an N-terminal 6-aminohexanoic acid moiety to provide a spacer between the SPR sensor chip and the peptide. The mol. construct with the hexaethylene glycol spacer showed an affinity comparable to the native diphosphorylated ITAM peptide. The results indicated that a nonpeptide spacer can substitute the intervening amino acids in the native Syk tandem SH2 domain binding ligand.

437655-98-6P 437655-99-7P IT RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(diphosphopeptide analog; oligoethylene glycol derivative spacer preparation and

use in linking monophosphorylated peptides in relation to Syk kinase

SH2 domain binding) RN 437655-98-6 CAPLUS

CN

L-Leucinamide, N-acetyl-O-phosphono-L-tyrosyl-L-threonylglycyl-L-leucyl-20amino-3,6,9,12,15,18-hexaoxaeicosanoyl-O-phosphono-L-tyrosyl-L-aglutamyl-L-threonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-C

RN 437655-99-7 CAPLUS

CN L-Leucinamide, N-acetyl-O-phosphono-L-tyrosyl-L-threonylglycyl-L-leucyl-14amino-3,6,9,12-tetraoxatetradecanoyl-O-phosphono-L-tyrosyl-L-αglutamyl-L-threonyl- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

H2N S Bu-1

NH

Me S N H OPPO3H2

- IT 391684-35-8P 437655-94-2P 437655-95-3P 437655-96-4P
  - RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
    - (intermediate; oligoethylene glycol derivative spacer preparation and use in linking monophosphorylated peptides in relation to Syk kinase SH2
    - domain binding)
- RN 391684-35-8 CAPLUS CN 5,8,11,14,17,20-Hexaoxa-2-azadocosanedioic acid,
- 1,22-bis(1,1-dimethylethyl) ester (CA INDEX NAME)

PAGE 1-A

RN 437655-94-2 CAPLUS

PAGE 1-A

PAGE 1-B

RN 437655-95-3 CAPLUS

CN 5,8,11,14-Tetraoxa-2-azahexadecanedioic acid, 1-(9H-fluoren-9-ylmethyl) ester (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 437655-96-4 CAPLUS

CN 5,8,11,14,17,20-Hexaoxa-2-azadocosanedioic acid, 1-(9H-fluoren-9-ylmethyl) ester (CA INDEX NAME)

PAGE 1-A

OS.CITING REF COUNT: 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)

L5 ANSWER 8 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2001:463245 CAPLUS

DOCUMENT NUMBER: 135 - 47462

TITLE:

Fluorine-containing block copolymers with improved solvent and cold resistance, and their manufacture

INVENTOR(S): Hisamatsu, Yasuyoshi; Tatsu, Harumi PATENT ASSIGNEE(S): Nippon Mectron Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkvo Koho, 12 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001172343	A	20010626	JP 1999-362570	19991221
PRIORITY APPLN. INFO.:			JP 1999-362570	19991221
AB The copolymers are	manufac	tured from	(a) vinvlidene fluoride,	(b) other

monomers, and (c) CH2:CHCH2NHCOCF(CF3)O[CF2CF(CF3)O]mRf[OCF(CF3)CF2]nOCF(C F3)CONHCH2CH:CH2 (I; Rf = C2-6 perfluoroalkylene; m, n > 0; m +  $n \ge$ 20). Thus, vinylidene fluoride, perfluoro(Me vinyl ether), and I (Rf =

CF2CF2, m + n = 32) were polymerized to give block copolymer. A composition containing

the copolymer was vulcanized to give a test piece showing 23.4% volume change after soaking in MeOH at 40° for 70 h and good low-temperature resistance in T-R test.

344920-39-4P

RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation) (rubber; manufacture of F-containing block copolymers with improved solvent

and cold resistance) RN

344920-39-4 CAPLUS CN Poly(oxy(trifluoro(trifluoromethyl)-1,2-ethanediyl)),

 $\alpha, \alpha' - (1, 1, 2, 2 - \text{tetrafluoro} - 1, 2 - \text{ethanediyl})$  bis  $[\omega - [1, 2, 2, 2 -$ 

tetrafluoro-1-[(2-propenylamino)carbonyl]ethoxy]-, polymer with 1,1-difluoroethene and trifluoro(trifluoromethoxy)ethene, block (9CI) (CA INDEX NAME)

CM 1

CRN 162442-49-1

CMF (C3 F6 O)n (C3 F6 O)n C14 H12 F12 N2 O4

CCT IDS, PMS

PAGE 1-B

CM 2

CRN 1187-93-5 CMF C3 F6 O

CM 3

CRN 75-38-7 CMF C2 H2 F2

CH<sub>2</sub>

AUTHOR(S):

L5 ANSWER 9 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2001:417889 CAPLUS

DOCUMENT NUMBER: 135:262107

DOCUMENT NUMBER: 135:26210 TITLE: Evaluatio

Evaluation of carboxymethyl pullulan as a novel

carrier for targeting immune tissues
Masuda, Kazuyoshi; Sakagami, Masahiro; Horie,

Kazutoshi; Nogusa, Hideo; Hamana, Hiroshi; Hirano,

Koichiro CORPORATE SOURCE: Shionogi

CORPORATE SOURCE: Shionogi Research Laboratories, Shionogi and Co., Ltd., Osaka, 553-0002, Japan SOURCE: Pharmaceutical Research (2001), 18(2), 217-223

CODEN: PHREEB; ISSN: 0724-8741

PUBLISHER: Kluwer Academic/Plenum Publishers
DOCUMENT TYPE: Journal

LANGUAGE: English

AB The potential of carboxymethyl pullulan (CMPul) as a carrier for targeting immune tissues was demonstrated, and it was determined whether immune tissues

could be set as the target of an immunosuppressant to treat autoimmune diseases. The biodistribution of CMPul was investigated to evaluate its potency as a carrier for targeting immune tissues. Furthermore, an immunosuppressant-CMPul conjugate was prepared and its suppressive effect on rat adjuvant arthritis was examined The disappearance rate of 3H-labeled CMPul from the blood circulation was much slower than that of 3H-labeled pullulan (Pul) after i.v. injection to normal rats. The concentration of 3H-labeled CMPul in the spleen and lymph nodes was much higher than that of 3H-labeled Pul at 24 h after the injection, whereas the concentration of 3H-labeled CMPul in the liver was significantly lower than that of 3H-labeled Pul. A similar targeting property of 3H-labeled CMPul for these immune tissues was observed in arthritic rats. A conjugate composed of a novel immunosuppressant PA-48153C and CMPul showed a suppressive effect on rat adjuvacarboxymethylpullulannt arthritis judging from a reduction of the arthritic index and spleen weight and an increase of body weight CMPul is expected to be a promising carrier for targeting immune tissues with an immunosuppressant to enable treatment of autoimmune diseases.

IT 217180-85-3DP, conjugate with carboxymethylpullulan RL: BPR (Balodgical process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (evaluation of carboxymethyl pullulan as novel carrier for targeting immune tissues)

RN 217180-85-3 CAPLUS

CN 3,6,9,12,15-Pentaoxaheptadecanoic acid, 17-amino-,

(1R, 2S, 3R, 4S, 6E) -1-[[(2R, 3R)-3-ethyl-3, 6-dihydro-6-oxo-2H-pyran-2-yl]methyl]-3-methoxy-2, 4-dimethyl-6-octen-1-yl ester (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

PAGE 1-B

NH<sub>2</sub>

RN

CN

IT 217180-86-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(evaluation of carboxymethyl pullulan as novel carrier for targeting immune tissues)

217180-86-4 CAPLUS

3,6,9,12,15-Pentaoxaheptadecanoic acid, 17-amino-, (1R,2S,3R,4S,6E)-1-[((2R,3R)-3-ethyl-3,6-dihydro-6-oxo-2H-pyran-2-yl]methyl]-3-methoxy-2,4-dimethyl-6-octenyl ester, trifluoroacetate (9CI)

(CA INDEX NAME)

CM 1

CRN 217180-85-3

CMF C31 H55 N O10

Absolute stereochemistry. Double bond geometry as shown.

PAGE 1-A

PAGE 1-B

NHo

2

CRN 76-05-1 CMF C2 H F3 O2

F-C-C02H

OS.CITING REF COUNT: REFERENCE COUNT:

THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD

(8 CITINGS)

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS 13 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: DOCUMENT NUMBER:

TITLE:

2001:391002 CAPLUS 135:153204

Synthesis of a Series of Oligo(ethylene

glycol)-Terminated Alkanethiol Amides Designed to Address Structure and Stability of Biosensing

Interfaces AUTHOR(S):

Svedhem, Sofia; Hollander, Carl-Aake; Shi, Jing; Konradsson, Peter; Liedberg, Bo; Svensson, Stefan C.

CORPORATE SOURCE: Divisions of Chemistry and Applied Physics Department of Physics and Measurement Technology, Linkoepings Universitet, Linkoeping, SE-581 83, Swed. Journal of Organic Chemistry (2001), 66(13), 4494-4503 CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

SOURCE:

A strategy for the synthesis of a series of closely related oligo (ethylene glycol)-terminated alkanethiol amides (principally HS(CH2)mCONH(CH2CH2O)nH; m = 2, 5, 11, 15, n = 1, 2, 4, 6, 8, 10, 12) and analogous esters was developed. These compds, were made to study the structure and stability of self-assembled monolayers (SAMs) on gold in the prospect of designing new biosensing interfaces. For this purpose, monodisperse heterofunctional oligo(ethylene glycols) with up to 12 units were prepared Selective monoacylation of the sym. tetra- and hexa(ethylene glycol) diols as their mesylates with the use of silver(I) oxide was performed. The synthetic approach was based on carbodiimide couplings of various oligo(ethylene glycol) derivs. to m-(acetylthio) carboxylic acids via a terminal amino or hydroxyl function. SAM structures on gold were studied with respect to thickness, wettability (water contact angles .apprx.30°), and conformation. A good fit was obtained for the relation between monolayer thickness (d) and the number of units in the oligo(ethylene glycol) chain (n): d=2.8n+21.8 (Å). Interestingly, the corresponding IR spectroscopy anal, showed a dramatic change in conformation of the oligomeric chains from all-trans (n = 4) to helical (n ≥ 6) conformation. A crystalline helical structure was observed in the SAMs for n>6.

IT 297162-50-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
 (Intermediate; in synthesis of oligo(ethylene glycol)-terminated
 alkanethiol amides useful for biosensors)

RN 297162-50-6 CAPLUS

CN 3,6,9,12,15,18-Hexaoxaeicosanoic acid, 20-amino-, 1,1-dimethylethyl ester (CA INDEX NAME)

PAGE 1-A

t-Buo-C-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-

PAGE 1-B

- CH2-CH2-O-CH2-CH2-NH2

IT 352439-47-5P 352439-48-6P 352439-49-7P RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (synthesis of oligo(ethylene glycol)-terminated alkanethiol amides useful for biosensors)

RN 352439-47-5 CAPLUS

CN 3,6,9,12,15,18-Hexaoxa-38-thia-21-azatetracontanoic acid, 22,39-dioxo-(CA INDEX NAME) HO2C-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-O-CH2-O-

PAGE 1-B

RN 352439-48-6 CAPLUS

CN Acetic acid, 2-[(34-mercapto-19-oxo-3,6,9,12,15-pentaoxa-18azatetratriacont-1-yl)oxy]- (CA INDEX NAME)

PAGE 1-A

$${\tt HO_2C-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_$$

PAGE 1-B

352439-49-7 CAPLUS RN

CN 3,6,9,12,15,18-Hexaoxa-21-azaheptatriacontanamide, N-hexadecy1-37-mercapto-22-oxo- (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

OS.CITING REF COUNT:

THERE ARE 70 CAPLUS RECORDS THAT CITE THIS RECORD (71 CITINGS)

REFERENCE COUNT:

THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

50 L5 ANSWER 11 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN 2001:214540 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

135:30391

TITLE: Synthesis of [Ru(phen)2dppz]2+-tethered oligo-DNA and

studies on the metallointercalation mode into the DNA

duplex

AUTHOR(S): Ossipov, Dimitri; Pradeepkumar, P. I.; Holmer, Melcer;

Chattopadhyaya, Jyoti

CORPORATE SOURCE: Department of Bioorganic Chemistry Biomedical Center, University of Uppsala, Uppsala, Swed.

Journal of the American Chemical Society (2001),

123(15), 3551-3562

CODEN: JACSAT; ISSN: 0002-7863 PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 135:30391

To explore the binding properties of [Ru(phen)2dppz]2+ complex (phen = 1,10-phenanthroline, dppz = dipyrido[3,2-a:2',3'-c]phenazine) in a sequence-specific manner in DNA duplex, it was tethered through the dppz ligand to a central position as well as both at the 3'- and 5'-ends of oligodeoxyribonucleotide (ODN). The middle [Ru(phen)2dppz]2+-ODN tethered was resolved and isolated as four pure diastereomers, while the 3'- or 5'-[Ru(phen)2dppz]2+-ODNs were inseparable on RP-HPLC. Thermal stability of the (Ru2+-ODN) DNA duplexes is found to increase considerably  $(\Delta Tm = 12.8-23.4^{\circ})$ , depending upon the site of the covalent attachment of the tethered [Ru(phen)2dppz]2+ complex, or the chirality of the [Ru(phen)2dppz]2+-linker tethered at the middle of the ODN, compared to the unlabeled counterpart. Gross differences in CD between the [Ru(phen)2dppz]2+-tethered and the native DNA duplexes showed that the global duplex conformation of the former has considerably altered from the B-type, but is still recognized by DNase I. The thermal melting studies, CD measurements, as well as DNase I digestion data, are interpreted as a result of intercalation of the dppz molety, which is realized by threading of the Ru(phen)2 complex part through the DNA duplex core. DNase I footprinting with four diastereomerically pure middle ([Ru(phen)2dppz]2+-ODN) DNA duplexes furthermore showed that the tethered [Ru(phen)2dppz]2+-linker chirality dictates the stereochem.

accessibility of various phosphodiester moieties (around the intercalation site) toward the cleavage reaction by the enzyme. The diastereomerically pure ruthenium-modified duplexes, with the well-defined π-stack, will be useful to explore stereochem. -dependent energy- and electron-transfer chemical to understand oxidative damage to the DNA double helix as well as the long-range energy- and electron-transfer processes with DNA as a reactant.

ΙT 342906-45-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (synthesis of [Ru(phen)2dppz]2+-tethered oligodeoxyribonucleotides)

342906-45-0 CAPLUS RN

CN Ruthenium(1+), [mono[1-[[bis(4-methoxyphenv1)phenvlmethoxy]methv1]-13-(dipyrido[3,2-a:2',3'-c]phenazin-11-yl-kN4,kN5)-13-oxo-3,6,9trioxa-12-azatridec-1-yl] butanedioato]bis(1,10-phenanthroline-KN1, KN10)-, (OC-6-33)- (9CI) (CA INDEX NAME)

PAGE 1-B

OS.CITING REF COUNT: 30 THERE ARE 30 CAPLUS RECORDS THAT CITE THIS

RECORD (30 CITINGS)

REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 12 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:183393 CAPLUS

DOCUMENT NUMBER: 134:362955

TITLE: Selective adhesion of endothelial cells to artificial membranes with a synthetic RGD-lioopeptide

AUTHOR(S): Marchi-Artzner, Valerie; Lorz, Barbara; Hellerer, Ulrike; Kantlehner, Martin; Kessler, Horst; Sackmann,

Erich

CORPORATE SOURCE: Institut fur Physik, Biophysik E22 Technische Universitat Munchen, Garching, 85747, Germany

SOURCE: Chemistry-A European Journal (2001), 7(5), 1095-1101

CODEN: CEUJED; ISSN: 0947-6539

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

AR A constrained cyclic Arg-Gly-Asp-D-Phe-Lys, abbreviated as cyclo(-RGDfK-), lipopeptide has been synthesized and incorporated into artificial membranes such as giant vesicles with DOPC and solid-supported lipid bilayers. The selective adhesion and spreading of endothelial cells of the human umbilical cord on solids functionalized by membranes with this RGD-lipopeptide have been observed Furthermore, we have demonstrated strong selective adhesion of giant vesicles to endothelial cells through local adhesion domains by combined application of hydrodynamic flow field and reflection interference contrast microscopy (RICM). The adhesion can be

inhibited by competition with a water-soluble RGD peptide. We suggest that this strategy could improve the efficiency of liposomes targeting used as vectors or as drug carriers to cells.

IT 339547-58-9P

RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (Selective adhesion of endothelial cells to artificial membranes with a synthetic RSD-liopoeptide)

RN 339547-58-9 CAPLUS

CN Cyclo[L-arginylglycyl-L-α-aspartyl-D-phenylalanyl-N6-(18-nonadecyl-1,17-dioxo-3,6,9,12,15-pentaoxa-18-azaheptatriacont-1-yl)-L-lysyl] (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

$$\begin{array}{c} \text{Me} & \text{(CH2)}_{18} \\ \text{Me} & \text{(CH2)}_{18} \\ \text{O} & \text{O} & \text{O} \\ \end{array}$$

PAGE 1-B

IT 339547-51-2P 339547-56-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(selective adhesion of endothelial cells to artificial membranes with a synthetic RGD-lipopeptide)

RN 339547-51-2 CAPLUS

CN Cyclo[L- $\alpha$ -aspartyl-D-phenylalanyl-N6-(18-octadecyl-1,17-dioxo-3,6,9,12,15-pentaoxa-18-azahexatriacont-1-yl)-L-lysyl-N5-[imino[[(4-methoxy-2,3,6-trimethylphenyl)sulfonyl]amino]methyl]-L-ornithyl], 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

t-BuO-

PAGE 1-B

RN 339547-56-7 CAPLUS

CN Cyclo[L-α-aspartyl-D-phenylalanyl-N6-(18-octadecyl-1,17-dioxo-3,6,9,12,15-pentaoxa-18-azahexatriacont-1-yl)-L-lysyl-N5-[[(2,3-dihydro-2,2,4,5,7-pentamethyl-6-benzofuranyl)sulfonyl]amino]iminomethyl]-L-ornithyl], 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

t-BuO-

PAGE 1-B

OS.CITING REF COUNT: REFERENCE COUNT:

30 THERE ARE 30 CAPLUS RECORDS THAT CITE THIS

RECORD (30 CITINGS)

38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 13 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:52907 CAPLUS DOCUMENT NUMBER: 134:277052

TITLE: Cell-surface recognition of biotinylated membrane proteins requires very long spacer arms: an example

from glucose-transporter probes

Hashimoto, Makoto; Yang, Jing; Holman, Geoffrey D. AUTHOR(S): CORPORATE SOURCE: Department of Biology and Biochemistry, University of Bath, Bath, BA2 7AY, UK

SOURCE: ChemBioChem (2001), 2(1), 52-59

Published in: Angew. Chem., Int. Ed., 40(1)

CODEN: CBCHFX; ISSN: 1439-4227 Wiley-VCH Verlag GmbH

PUBLISHER: Journal

DOCUMENT TYPE:

LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:277052

Glucose transporters (GLUTs) can be photoaffinity labeled by (diazirinetrifluoroethyl)benzoyl-substituted glucose derivs. and the adduct can be recognized, after detergent solubilization of membranes, by using streptavidin-based detection systems. However, in intact cells recognition of photolabeled GLUTs by avidin and anti-biotin antibodies only occurs if the bridge between the photoreactive and the biotin moieties has a min. of 60-70 spacer atoms. We show that a suitably long bridge can be synthesized with a combination of polyethylene glycol and tartrate groups and that introduction of these spacers generates hydrophilic products that can be cleaved with periodate. Introduction of the very long spacers does not appreciably reduce the affinity of interaction of the probes with the transport system.

IT 332941-37-4P 332941-54-5P 332941-56-7P

RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(reagents with long spacer arms between biotin and photoaffinity label can be used for cell-surface recognition of biotinylated glucose transporters)

RN 332941-37-4 CAPLUS

CN D-Glucose, 4-0-[24-carboxy-2-[[4-[3-(trifluoromethyl)-3H-diazirin-3-yl]benzoyl]amino]-4,7,10,13,16,19,22-heptaoxatetracos-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 332941-54-5 CAPLUS

CN D-Glucose, 4-0-[62-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-25,51,58-trioxo-2-[[4-[3-(trifluoromethyl)-3H-diazirin-3-

 $\label{eq:condition} $$y1]$ benzoy1]amino]-4,7,10,13,16,19,22,29,32,35,38,41,44,47-tetradecaoxa-26,50,57-triazadohexacont-1-y1]- (CA INDEX NAME)$ 

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 332941-56-7 CAPLUS

## Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 1-C

IT 332941-34-1P 332941-35-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(reagents with long spacer arms between biotin and photoaffinity label can be used for cell-surface recognition of biotinylated glucose transporters)

- RN 332941-34-1 CAPLUS
- CN D-Glucose, 4-0-[2-[(1,1-dimethylethoxy)carbonyl]amino]-27,27-dimethyl-25oxo-4,7,10,13,16,19,22,26-octaoxaoctacos-1-yl]-2,3:5,6-bis-0-(1methylethylidene)-, 1-(dimethyl acetal) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

- RN 332941-35-2 CAPLUS
- CN D-Glucose, 4-0-[24-carboxy-2-[[(1,1-dimethylethoxy)carbonyl]amino]-4,7,10,13,16,19,22-heptaoxatetracos-1-yl]- (CA INDEX NAME)

PAGE 1-B

\_\_\_O\_\_\_\_CO2H

OS.CITING REF COUNT: 32 THERE ARE 32 CAPLUS RECORDS THAT CITE THIS

RECORD (32 CITINGS)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 14 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:659767 CAPLUS

DOCUMENT NUMBER: 133:242720

TITLE: Bioabsorbable triglycolic acid poly(ester-amide)s for

sutures and implants INVENTOR(S): Barrows, Thomas Harry

PATENT ASSIGNEE(S): BioAmide, Inc., USA SOURCE: U.S., 9 pp.

CODEN: USXXAM
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6120788	A	20000919	US 1998-174136	19981016
US 6365172	B1	20020402	US 2000-630118	20000801
PRIORITY APPLN. INFO.:			US 1997-62064P P	19971016
			US 1998-174136 A	3 19981016

AB This invention relates to fiber-forming bioabsorbable poly(ester-amide)s made by the polymerization of diamidediols with 3,6-dioxaoctanedioic acid, also known as "triglycolic acid". More specifically it relates to diol terminated poly(ester-amide)s of triglycolic acid that are optionally further reacted with glycolide, lactide, trimethylene carbonate, epsilon-caprolactone, or p-dioxanone, or mixts. of said cyclic monomers to produce the corresponding block copolymers. Said polymers are useful in the production of surgical sutures having superior performance characteristics including low bending stiffness and in the production of other fiber-based bioabsorbable implants and molded devices.

IT 294198-19-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(bioabsorbable triglycolic acid poly(ester-amide)s for sutures and implants)

RN 294198-19-9 CAPLUS

CN Poly[oxy(1-oxo-1,2-ethanediy1) oxy-1,2-ethanediy1oxy(2-oxo-1,2ethanediy1) oxy(2-oxo-1,2-ethanediy1) imino-1,6-hexanediy1imino(1-oxo-1,2ethanediy1)] (9C1) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

IT 294198-16-6DP, 1,6-hexanediol terminated 294198-17-7P 294198-18-8P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(bioabsorbable triglycolic acid poly(ester-amide)s for sutures and implants)

RN 294198-16-6 CAPLUS

- CN Poly(oxy(1-oxo-1,2-ethanediy1) oxy-1,2-ethanediy1oxy(2-oxo-1,2-ethanediy1) oxy(2-oxo-1,2-ethanediy1) imino-1,6-hexanediy1imino(1-oxo-1,2-ethanediy1)], a-(6-hydroxyhexy1) oxy
  - (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 294198-17-7 CAPLUS

- 1,4-Dioxane-2,5-dione, polymer with  $\alpha$ -(6-hydroxyhexyl)oxy|poly|(oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl)oxy-1,2-ethanediyl)oxy-1,2-ethanediyl)imino-1,6-hexanediylimino(1-oxo-1,2-ethanediyl)|, block (9CI)(CA INDEX NAME)
- CM 1

CN

CRN 294198-16-6

CMF (C16 H26 N2 O8)n C12 H26 O3

CCI PMS

PAGE 1-B

CM 2

CRN 502-97-6 CMF C4 H4 O4

RN 294198-18-8 CAPLUS CN 1,4-Dioxane-2,5-dio

1,4-Dioxane-2,5-dione, 3,6-dimethyl-, polymer with a-(6-hydroxyhexyl)-om((6-hydroxyhexyl)-oxylpoly(loxy(1-oxo-1,2-ethanediyl)) oxy-1,2-ethanediyl) oxy-1,2-ethanediyl) imino-1,6-hexanediylimino(1-oxo-1,2-ethanediyl)], block (9CI) (CA INDEX NAME)

CM 1

CRN 294198-16-6

CMF (C16 H26 N2 O8)n C12 H26 O3

CCI PMS

PAGE 1-A

PAGE 1-B

CM 2

CRN 95-96-5 CMF C6 H8 O4



OS.CITING REF COUNT: 24 THERE ARE 24 CAPLUS RECORDS THAT CITE THIS

RECORD (27 CITINGS)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 15 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:500228 CAPLUS

DOCUMENT NUMBER: 133:262810

TITLE: Preparation of Mixed Self-Assembled Monolayers (SAMs)
That Resist Adsorption of Proteins Using the Reaction

of Amines with a SAM That Presents Interchain

Carboxvlic Anhydride Groups

AUTHOR(S): Chapman, Robert G.; Ostuni, Emanuele; Yan, Lin;

Whitesides, George M.

CORPORATE SOURCE: Department of Chemistry and Chemical Biology, Harvard

University, Cambridge, MA, 02138, USA Langmuir (2000), 16(17), 6927-6936

SOURCE: Langmuir (2000), 16(17), 6927-69 CODEN: LANGD5; ISSN: 0743-7463

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 133:262810

AB This paper describes a procedure for preparing mixed self-assembled monolayers (mixed SAMs) on gold that resist the nonspecific adsorption of proteins from solution This method was tested using a-amino derives, of

ω-hydroxy- and ω-methoxy-oligo(ethylene glycols):

 $\rm H2N(CH2CH2O)nCH3$  and  $\rm H2N(CH2CH2O)nH$  (n = 3, 6). Mixed SAMs were prepared by allowing these amines to react with a SAM presenting interchain carboxylic anhydride groups. The resistance of the resulting surfaces to adsorption of several proteins-carbonic anhydrase (EC 4.2.1.1). RNase A (EC

3.1.27.5), lysozyme (EC 3.2.1.17), and fibrinogen-was examined using surface plasmon resonance (SPR) spectroscopy. These mixed SAMs resist the

nonspecific adsorption of proteins approx. as effectively as

single-component SAMs prepared using the conventional method involving

chemisorption of oligo(ethylene glycol)-terminated alkanethiols on gold.

Characterization of the mixed SAM that presents a 1:1 mixture of -OCNH(CH2CH2O)6CH3 and CO2H/CO2- groups by polarized IR external

reflectance spectroscopy indicates that the ethylene glycol units are in

an amorphous conformation. A model surface for use in studies of biospecific adsorption was synthesized by reacting the anhydride groups

with a mixture of H2N(CH2CH2O)6H and

H2N(CH2CH2O)6CH2CONH(CH2)6MHCOC6H4SO2NH2; the resulting system was examined for its ability to bind bovine carbonic anhydrase by SPR. The values of the relevant consts. were koff =  $0.0054~\text{s}^{-1}$ , kon =  $13~000~\text{M}^{-1}~\text{s}^{-1}$ , and Kd

= 0.42  $\mu M$ . These values agree with values obtained by other means. The reaction of amines with SAMs that present interchain carboxylic

anhydrides provides an exptl. simple route to the formation of mixed SAMs that resist the nonspecific adsorption of proteins or that adsorb a protein of interest biospecifically.

297162-50-6P 297162-51-7P 297162-52-8P 297162-53-9P 297162-54-0P 297162-55-1P

TТ

297162-57-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of mixed self-assembled monolayers (SAMs) that resist adsorption of proteins using the reaction of amines with a SAM that presents interchain carboxylic anhydride groups)

RN 297162-50-6 CAPLUS

CN 3,6,9,12,15,18-Hexaoxaeicosanoic acid, 20-amino-, 1,1-dimethylethyl ester (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 297162-51-7 CAPLUS

CN 5,8,11,14,17,20-Hexaoxa-2-azadocosanedioic acid, 22-(1,1-dimethylethyl)
1-(phenylmethyl) ester (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 297162-52-8 CAPLUS

CN 5,8,11,14,17,20-Hexaoxa-2-azadocosanedioic acid, 1-(phenylmethyl) ester (CA INDEX NAME)

PAGE 1-A

- CH2-CH2-O-CH2-CH2-O-CH2-CO2H
- RN 297162-53-9 CAPLUS
- CN 5,8,11,14,17,20-Hexaoxa-2,23,30-triazahentriacontanedioic acid, 22-oxo-, 31-(1,1-dimethylethyl) 1-(phenylmethyl) ester (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

- RN 297162-54-0 CAPLUS
- CN 5,8,11,14,17,20-Hexaoxa-2,23-diazanonacosanoic acid, 29-amino-22-oxo-, phenylmethyl ester (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

- RN 297162-55-1 CAPLUS
- CN 5,8,11,14,17,20-Hexaoxa-2,23,30-triazahentriacontanoic acid, 31-[4-(aminosulfonyl)phenyl]-22,31-dioxo-, phenylmethyl ester (CA INDEX NAME)

PAGE 1-A

- O- CH2- CH2- O- CH2- CH2- O- CH2- CH2- O- CH2- CH2- NH- C- O- CH2- Ph

297162-57-3 CAPLUS

3,6,9,12,15,18-Hexaoxaeicosanamide,

20-amino-N-[6-[[4-(aminosulfonvl)benzovl]amino]hexvl]- (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

- 0- CH2- CH2- 0- CH2- CH2- 0- CH2- CH2- 0- CH2- CH2- NH2

OS.CITING REF COUNT: THERE ARE 125 CAPLUS RECORDS THAT CITE THIS

RECORD (126 CITINGS)

REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 16 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2000:41754 CAPLUS

DOCUMENT NUMBER: 132:208087

TITLE: Dipyrido[3,2-a:2',3'-c]phenazine-tethered oligo-DNA: synthesis and thermal stability of their DNA .

DNA and DNA · RNA duplexes and DNA · DNA

· DNA triplexes

AUTHOR(S): Ossipov, Dimitri; Zamaratski, Edouard; Chattopadhyaya,

Jyoti

CORPORATE SOURCE: Department of Bioorganic Chemistry, Biomedical Center, University of Uppsala, Swed.

Helvetica Chimica Acta (1999), 82(12), 2186-2200 SOURCE: CODEN: HCACAV; ISSN: 0018-019X

PUBLISHER: Verlag Helvetica Chimica Acta

DOCUMENT TYPE: Journal

LANGUAGE: English

Dipyrido[3,2-a:2',3'-c]phenazine (dppz) derivs. were conjugated to 9-mer and 18-mer DNA (ODN) at a site without nucleobase, either at the 5'- or 3'-end or at a internucleotide position, via linkers of 7, 12, or 18 atoms lengths. These dppz-linked ODNs were synthesized using novel backbone glycerol phosphoramidites: glycerol, serving as artificial nucleoside without nucleobase, was modified to amines which were suitable for the subsequent key reaction with dppz-carboxylic acid. The products of these reactions were then transformed to the standard phosphoramidite derivs. or used for loading on a CPG support. The dppz-modified ODNs were

subsequently assembled in the usual manner using automated solid-phase DNA synthesis. The 9-mer ODN-dppz conjugates were tested for their ability to form stable duplexes with target DNA or RNA strands (D11 or R11) while the 18-mer ODN-dppz conjugates were tested for their ability to form stable triplexes with a DNA target duplex D24 - D24. The presence of the conjugated dppz derivative increases the stability of DNA - DNA and DNA - RNA duplexes, typically by a ATm of 7.3-10.9° and 4.5-1.4°, resp., when the dppz is tethered at the 5'- or 3'-end, with a ATm varying from 3.8-11.1°. The insertion of a dppz building block at the center of a 9-mer results in a considerably poorer stability of the corresponding DNA - DNA duplexes (ATm = -1.5 to 0.9°), while the replacement of one interior

nucleotide by a dppz building unit in the corresponding 8-mer ODN does not reveal the formation of any duplex at all. Different types of

modifications in the middle of the 18-mer ODM, in general, do not lead to any triplex formation, except when the dppz derivative is tethered to the ODM through a 12-atom-long linker.

259796-43-5DP, CPG bound 259796-44-6DP, CPG bound RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis and thermal stability of dipyrido[phenazine]-tethered oligo-DNA and their DNA/RNA duplexes and triplexes)

259796-43-5 CAPLUS
Butanedioic acid, 1-[1-[[bis(4-methoxypheny1)phenylmethoxy]methyl]-13-oxo13-quinoxalino[2,3-f][1,10]phenanthrolin-11-yl-3,6,9-trioxa-12-azatridec-1-yl] ester (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 259796-44-6 CAPLUS

RN

CN

N Butanedioic acid, 1-[1-[[bis(4-methoxypheny1)phenylmethoxy]methyl]-19-oxo-19-quinoxalino[2,3-f][1,10]phenanthrolin-11-yl-3,6,9,12,15-pentaoxa-18-azanonadec-1-yl] ester (CA INDEX NAME)

PAGE 1-B

IT 259796-43-5P 259796-44-6P
RI: SPN (Synthetic preparation); PREP (Preparation)
(synthesis and thermal stability of dipyrido(phenazine)-tethered

oligo-DNA and their DNA/RNA duplexes and triplexes)

RN 259796-43-5 CAPLUS
CN Butanedioic acid, 1-[1-[[bis(4-methoxypheny1)phenylmethoxy]methyl]-13-oxo13-quinoxalino[2,3-f][1,10]phenanthrolin-11-yl-3,6,9-trioxa-12-azatridec-1yl] ester (CA INDEX NAME)

PAGE 1-A

- RN 259796-44-6 CAPLUS
- CN Butanedioic acid, 1-[1-[[bis(4-methoxyphenyl)phenylmethoxy]methyl]-19-oxo-19-quinoxalino[2,3-f][1,10]phenanthrolin-11-yl-3,6,9,12,15-pentaoxa-18azanonadec-1-yl] ester (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

OS.CITING REF COUNT:

23 THERE ARE 23 CAPLUS RECORDS THAT CITE THIS RECORD (23 CITINGS)

REFERENCE COUNT:

39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 17 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN SSION NUMBER: 1999:796151 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

132:36866

INVENTOR(S):

Manufacture of fluoro-containing block copolymers Tatsu, Haruyoshi; Hisamatsu, Yasuyoshi

PATENT ASSIGNEE(S): SOURCE: Nippon Mektron, Japan Ger. Offen., 10 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	DE 19926260	A1	19991216	DE 1999-19926260	19990609
	JP 11349647	A	19991221	JP 1998-163091	19980611
	JP 3336958	B2	20021021		
	US 6160051	A	20001212	US 1999-315771	19990520
RIO	RITY APPLN. INFO.:			JP 1998-163091	A 19980611
B	The title conclumers	are	manufactured	by copolyma CH2.CHF	and >1 othe

PRIORITY APPLIN. INFO.:

AB The title copolymers are manufactured by copolymg. CH2:CHF and ≥1 other fluoro monomer in the presence of iodo-terminated

poly(perfluoromethyloxiranes)

 $\begin{subarray}{l} $\mathbb{Z}p\widehat{CF}(CF3)0[\end{subarray}] 0CF(CF3)CF2] nOCF(CF3) \end{subarray} I \begin{subarray}{l} $\mathbb{Z} = \mathbb{C}2-8 \\ (O-interrupted) \end{subarray} [note of $\mathbb{Z}] \\ = \mathbb{C}2-6 \end{subarray} per \begin{subarray}{l} $\mathbb{Z} = \mathbb{C}2-6 \\ \mathbb{Z} = \mathbb{C}2-6 \end{subarray} per \begin{subarray}{l} $\mathbb{Z} = \mathbb{C}2-6 \\ \mathbb{Z} =$ 

For example, a mixture of diglyme 300, CsCO3 150 and iodine 160 g was stirred for 4 h at  $35-50^\circ$ , 3352 g of a com. dicarboxylic acid

 $\begin{array}{lll} \mbox{difluoride FOCCF(CF3)O[CF2CF(CF3)O]mCF2CF2[OCF(CF3)CF2]nOCF(CF3)COF} \; (\mbox{m} \; + \; n \\ = \; 51) \; \mbox{was added and the stirring continued (gas evolution).} \; \; \mbox{When} \\ \end{array}$ 

effervescence ceased the reaction mixture was worked up to give I (Z1 = CF2CF2, p = 0) (II) having mol. wt 9050. A mixture of CF2:CF2 183. CH2:CHE 821, CF2:CF0CF3 608, CF2:CF0CF2CF2Br 12.1, II 416.4, Na2HP04 11.0, NaHS03 0.8, C3F70(CF2)CCP3)CO2NH4 13.4 and (CF3)2CH0H 66 g in 3660 mL H2O was warmed up to  $45^\circ$ , 1.6 g K2S208 was added and the polymerization continued

for 24 h to give 2010 g copolymer having Mooney viscosity ML1+10 23 (125°), which was used to produce crosslinked fluoro rubber.

IT 252680-99-2P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(crosslinked, rubber; manufacture of fluoro rubber containing copolymers of fluoro monomers and iodo-terminated poly(perfluoromethyloxiranes))

RN 252680-99-2 CAPLUS

Poly[oxy[trifluoro(trifluoromethyl)-1,2-ethanediyl]], a, a'-(1,1,2,2-tetrafluoro-1,2-ethanediyl)bis[o-[1-[[[4-[(difluoroiodoacetyl)amino]phenyl]amino]carbonyl]-1,2,2,2-

tetrafluoroethoxy]-, polymer with (2-bromo-1,1,2,2-

tetrafluoroethoxy)trifluoroethene, 1,1-difluoroethene, tetrafluoroethene and trifluoro(trifluoromethoxy)ethene (9CI) (CA INDEX NAME)

CM

CN

CRN 252680-36-7

CMF (C3 F6 O)n (C3 F6 O)n C24 H12 F16 I2 N4 O6

CCI IDS, PMS

PAGE 1-A

$$-\operatorname{CF}_2 - \left[ -\operatorname{O-(C3F_6)} \right]_n - \left[ -\operatorname{CF}_2 - \operatorname{NH} \right]_{F} - \left[ -\operatorname{CF}_2 - \operatorname{II} \right]_{F}$$

CM 2

CRN 85737-06-0 CMF C4 Br F7 O

 $\begin{array}{c} \mathtt{CF_2} \\ || \\ \mathtt{F-C-O-CF_2-CF_2-Br} \end{array}$ 

CM 3

CRN 1187-93-5 CMF C3 F6 O

CF2 || F-C-O-CF3

CM 4

CRN 116-14-3 CMF C2 F4

F F F-C=C-F

CM 5

CRN 75-38-7 CMF C2 H2 F2

CH2 || F-C-F IΤ 252680-36-7P

> RL: IMF (Industrial manufacture); NUU (Other use, unclassified); PREP (Preparation); USES (Uses)

(manufacture of fluoro rubber containing copolymers of fluoro monomers and)

252680-36-7 CAPLUS

CMPoly(oxy(trifluoro(trifluoromethyl)-1,2-ethanediyl)],  $\alpha, \alpha'$ -(1,1,2,2-tetrafluoro-1,2-ethanediyl)bis[ $\omega$ -[1-[[[4-[(difluoroiodoacetyl)amino]phenyl]amino]carbonyl]-1,2,2,2tetrafluoroethoxy | - (9CI) (CA INDEX NAME)

PAGE 1-A

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

PAGE 1-B

THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

$$- CF_{2} - O - (C_{3}F_{6}) - O - C_{5} - NH - C_{5} - CF_{2} - I$$

(3 CITINGS)

L5 ANSWER 18 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1999:773409 CAPLUS

3

DOCUMENT NUMBER: 132:122950

TITLE: Synthesis of Polyamide Oligomers Based on

14-Amino-3,6,9,12-tetraoxatetradecanoic Acid Dhawan, Rajiv; Kadijk, Mark G. A.; Joikinen, Terry J.; AUTHOR(S):

Feng, Michael; Ansell, Steven M.

CORPORATE SOURCE: Inex Pharmaceuticals Corp., Burnaby, BC, V5J 5J8, Can.

SOURCE: Bioconjugate Chemistry (2000), 11(1), 14-21

CODEN: BCCHES; ISSN: 1043-1802

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OS.CITING REF COUNT:

A series of oligomers of polyamides based on

14-amino-3,6,9,12-tetraoxatetradecanoic acid monomers (ATTAn) was synthesized. These materials were designed as monodisperse analogs of poly(ethylene glycol) for use in biomedical applications where reproducible behavior is important. Synthesis of the monomer was evaluated using two routes. For small-scale prepns., tetraethylene glycol (TEG) was monoprotected with dihydropyran, converted to an alkoxide, and

alkylated with Et bromoacetate. On larger scales, TEG was alkylated directly by treatment with sodium, followed by Et bromoacetate. The amine function was introduced by mesylation followed by treatment with sodium azide. Reduction of the azide to amino groups was performed over Pd/C using either hydrogen or formic acid as proton sources. Assembly of the oligomers was accomplished using standard DCC/NHS chemical and an iterative dimerization sequence after appropriate deprotection of a pair of monomers. The amino group was protected by retaining the azido group as a latent amine. A series of ATTAn oligomers was prepared (n = 1-8). A lipid conjugate of the octamer, ATTA8-DSPE, was synthesized. 229645-50-5P 229645-52-7P 229645-54-9P 229645-56-1P 256397-66-7P 256397-67-8P 256397-68-9P 256397-69-0P 256397-70-3P 256397-71-4P 256397-72-5P 256397-73-6P 256397-74-7P 256397-75-8P 256397-76-9P 256397-77-0P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (synthesis of polyamide oligomers based on 14-amino-3,6,9,12-tetraoxatetradecanoic acid) 229645-50-5 CAPLUS 3,6,9,12-Tetraoxatetradecanoic acid, 14-amino-, ethyl ester (CA INDEX NAME) EtO C CH2 O CH2 CH2 NH2 229645-52-7 CAPLUS 3,6,9,12,18,21,24,27-Octaoxa-15-azanonacosanoic acid, 29-azido-16-oxo-, ethyl ester (CA INDEX NAME) PAGE 1-A -CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-NH-PAGE 1-B CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-N3 229645-54-9 CAPLUS 3,6,9,12,18,21,24,27,33,36,39,42,48,51,54,57-Hexadecaoxa-15,30,45triazanonapentacontanoic acid, 59-azido-16,31,46-trioxo-, ethyl ester (CA

RN

CN

RN

CN

RN

CN

INDEX NAME)

PAGE 1-A EtO - C - CH2 - O - CH2 - CH2 - NH - C -

PAGE 1-D

-- CH2--CH2--О--CH2--СH2--О--СH2--СH2-- N3

RN 229645-56-1 CAPLUS

- CN 3,6,9,12,18,21,24,27,33,36,39,42,48,51,54,57,63,66,69,72,78,81,84,87,93,96,99,102,108,111,114,117-Dotriacontaoxa-15,30,45,60,75,90,105-heptaazanonadecahectanoic acid, 119-azido-16,31,46,61,76,91,106-heptaoxo-, ethyl ester (CA INDEX NAME)
- \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*
- RN 256397-66-7 CAPLUS
- CN 3,6,9,12,18,21,24,27,33,36,39,42-Dodecaoxa-15,30-diazatetratetracontanoic acid, 44-azido-16,31-dioxo-, ethyl ester (CA INDEX NAME)

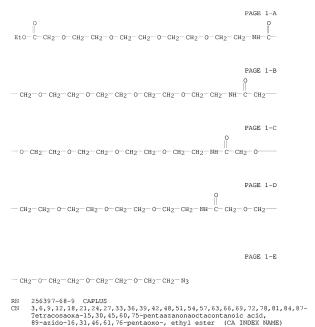
PAGE 1-A

PAGE 1-B

PAGE 1-C

RN 256397-67-8 CAPLUS

CN 3,6,9,12,18,21,24,27,33,36,39,42,48,51,54,57,63,66,69,72-Eicosaoxa-15,30,45,60-tetraazatetraheptacontanoic acid, 74-azido-16,31,46,61-tetraoxo-, ethyl ester (CA INDEX NAME)



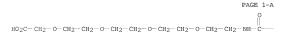
PAGE 1-A

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PAGE 1-D

PAGE 1-E

- RN 256397-69-0 CAPLUS
- CN 3,6,9,12,18,21,24,27,33,36,39,42,48,51,54,57,63,66,69,72,78,81,84,87,93,96,99,102-Octacosaoxa-15,30,45,60,75,90-hexaazatetrahectanoic acid, 104-azido-16,31,46,61,76,91-hexaoxo-, ethyl ester (CA INDEX NAME)
- \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*
  RN 256397-70-3 CAPLUS
- - azidoethoxy]ethoxy]ethoxy]ethoxy]acetyl]amino]ethoxy]ethoxy]ethoxy]ethoxy](CA INDEX NAME)



- -- CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-N3
- RN 256397-71-4 CAPLUS

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- RN 256397-72-5 CAPLUS

PAGE 1-A

PAGE 1-B

PAGE 1-C - O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-NH-C-CH2-O PAGE 1-D - CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-N3 RN 256397-73-6 CAPLUS CN Acetic acid, 2-[(116-azido-13,28,43,58,73,88,103-heptaoxo-3,6,9,15,18,21,24,30,33,36,39,45,48,51,54,60,63,66,69,75,78,81,84,90,93,96 ,99,105,108,111,114-hentriacontaoxa-12,27,42,57,72,87,102heptaazahexadecahect-1-yl)oxy]- (CA INDEX NAME) \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\* RN 256397-74-7 CAPLUS CN 3,6,9,12,18,21,24,27-Octaoxa-15-azanonacosanoic acid, 29-amino-16-oxo-, ethyl ester (CA INDEX NAME) PAGE 1-A EtO- C-CH2- O-CH2- CH2- O-CH2- CH2- CH2- CH2- CH2- O-CH2- CH2- NH-PAGE 1-B CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-NH2 RN 256397-75-8 CAPLUS CN 3,6,9,12,18,21,24,27,33,36,39,42-Dodecaoxa-15,30-diazatetratetracontanoic acid, 44-amino-16,31-dioxo-, ethyl ester (CA INDEX NAME) PAGE 1-A - CH2- O- CH2- CH2- O- CH2- CH2- O- CH2- CH2- O- CH2- CH2- NH-

C-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-NH-C

PAGE 1-B

- -- CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-NH2
- RN 256397-76-9 CAPLUS
- CN 3,6,9,12,18,21,24,27,33,36,39,42,48,51,54,57-Hexadecaoxa-15,30,45triazanonapentacontanoic acid, 59-amino-16,31,46-trioxo-, ethyl ester (CA INDEX NAME)
- PAGE 1-B
- CH<sub>2</sub>— O— CH<sub>2</sub>— CH<sub>2</sub>— CH<sub>2</sub>— CH<sub>2</sub>— O— CH<sub>2</sub>— CH<sub>2</sub>— CH<sub>2</sub>— NH— С— CH<sub>2</sub>—
- PAGE 1-C

PAGE 1-D

- -- CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-NH2
- RN 256397-77-0 CAPLUS
- CN 3,6,9,12,18,21,24,27,33,36,39,42,48,51,54,57,63,66,69,72,78,81,84,87,93,96,99,102,108,111,114,117-Dotriacontaoxa-15,30,45,60,75,90,105-heptaazanonadecahectanoic acid, 119-amino-16,31,46,61,76,91,106-heptaoxo-,ethyl ester (CA INDEX NAME)
- \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*
- IT 229645-58-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (synthesis of polyamide oligomers based on 14-amino-3,6,9,12-tetraoxatetradecanoic acid)

- RN 229645-58-3 CAPLUS
- CN Octadecanoic acid, (1R)-1-(126-azido-3-hydroxy-3-oxido-8,23,38,53,68,83,98,113-octaoxo-

2,4,10,13,16,19,25,28,31,34,40,43,46,49,55,58,61,64,70,73,76,79,85,88,91,94,100,103,106,109,115,118,121,124-tetratriacontaoxa-7,22,3752,67,82,97,112-octaoxa-3-phosphahexacosahect-1-yl)-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

```
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
OS.CITING REF COUNT:
                         2
                              THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
                               (2 CITINGS)
REFERENCE COUNT:
                         25
                              THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 19 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                        1999:722423 CAPLUS
DOCUMENT NUMBER:
                        132:313453
TITLE:
                        Oligo(14-amino-3,6,9,12-tetraoxatetradecanoic
                        acid)-lipid conjugates for use as steric barrier
                        molecules in liposomes
```

Ansell, S. M.; Kojic, L. D.; Boey, A.; Klimuk, S. K.; AUTHOR(S):

Harasym, T. O.; Semple, S. C.

CORPORATE SOURCE: Inex Pharmaceuticals Corp., Burnaby, V5J 5J8, Can. SOURCE: Proceedings of the International Symposium on Controlled Release of Bioactive Materials (1999),

26th, 667-668 CODEN: PCRMEY; ISSN: 1022-0178

PUBLISHER: Controlled Release Society, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

Polyamide oligomers (based on 14-amino-3,6,9,12-tetraoxatetradecanoic acid)-lipid conjugates can be used in most liposome applications where PEG is currently used. The new lipids were nontoxic, did not induce immune responses in vivo and did not adversely affect drug formulation. The oligomers are monodisperse, can be produced in a wide range of specific sizes and are intrinsically heterobifunctional.

195071-49-9DP, oligomers, conjugates with distearovlphosphatidylethanolamine 265983-94-6DP, conjugates

with distearcylphosphatidylethanolamine RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(oligo(14-amino-3,6,9,12-tetraoxatetradecanoic acid)-lipid conjugates for use as steric barrier mols. in liposomes)

195071-49-9 CAPLUS RN

CN Acetic acid, 2-[2-[2-(2-aminoethoxy)ethoxy]ethoxy]- (CA INDEX NAME)

265983-94-6 CAPLUS

CN 3,6,9,12-Tetraoxatetradecanoic acid, 14-amino-, ethyl ester, polymer with 14-azido-3,6,9,12-tetraoxatetradecanoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 229645-50-5 CMF C12 H25 N O6

EtO-C-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-NH2

CM 2

CRN 201467-81-4 CMF C10 H19 N3 O6

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HO2C - CH2 - O - CH2 - CH2 - N3
```

ΙT 229645-50-5P 229645-52-7P

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(oligo(14-amino-3,6,9,12-tetraoxatetradecanoic acid)-lipid conjugates for use as steric barrier mols. in liposomes)

229645-50-5 CAPLUS

CN 3,6,9,12-Tetraoxatetradecanoic acid, 14-amino-, ethyl ester (CA INDEX NAME)

0 EtO C CH2 O CH2 CH2 NH2

229645-52-7 CAPLUS RN

CN 3,6,9,12,18,21,24,27-Octaoxa-15-azanonacosanoic acid, 29-azido-16-oxo-, ethyl ester (CA INDEX NAME)

PAGE 1-A

0 EtO C CH2 O CH2 CH2 O CH2 CH2 CH2 CH2 CH2 CH2 CH2 CH2 CH2 NH

PAGE 1-B

0 C-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-N3

REFERENCE COUNT: THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 20 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:501607 CAPLUS DOCUMENT NUMBER:

132:93184

TITLE:

Study on polyamides. VII. Synthesis of open chain ether with pyridine as terminal group Jiao, Tian-Quan; Wang, Yan-Bo; Tan, Xiao-Mei; Liu, AUTHOR(S):

Ouan-Zhong CORPORATE SOURCE:

Department of Chemistry, State Key Laboratory of Applied Organic Chemistry, Lanzhou University, Lanzhou, 730000, Peop. Rep. China

SOURCE:

Hecheng Huaxue (1999), 7(2), 207-209 CODEN: HEHUE2; ISSN: 1005-1511

Hecheng Huaxue Bianjibu

PUBLISHER: DOCUMENT TYPE: Journal LANGUAGE: Chinese

- AB Five title compds. I (n = 0, 1, 2, 4; X = 0, electron pairs), II were prepared and characterized by elemental anal., IR, 1H NMR and MS spectroscope.
- 254896-77-0P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of polyamides)
- RN 254896-77-0 CAPLUS
- CN 3,6,9,12-Tetraoxatetradecanediamide, N1,N14-di-2-pyridinyl- (CA INDEX NAME)

PAGE 1-B

CORPORATE SOURCE:

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD OS.CITING REF COUNT: 1

(1 CITINGS)

ACCESSION NUMBER: 1999:334629 CAPLUS DOCUMENT NUMBER: 131:149166

TITLE: Application of

Oligo-(14-amino-3,6,9,12-tetraoxatetradecanoic acid)

Lipid Conjugates as Steric Barrier Molecules in

Liposomal Formulations AUTHOR(S):

Ansell, Steven M.; Kojic, Ljiljana D.; Hankins, Janet S.; Sekirov, Laura; Boey, Anthony; Lee, Dora K.; Bennett, Athena R.; Klimuk, Sandra K.; Harasym, Troy

O.; Santos, Nancy Dos; Semple, Sean C. Inex Pharmaceuticals Corp., Burnaby, BC, V5J 5J8, Can.

SOURCE: Bioconjugate Chemistry (1999), 10(4), 653-666

CODEN: BCCHES; ISSN: 1043-1802

ANSWER 21 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: Enalish Lipid conjugates of oligo-(14-amino-3,6,9,12-tetraoxatetradecanoic acid) (ATTAn) were synthesized as monodisperse analogs of poly(ethylene glycol) (PEG) derivs. used in liposomal drug delivery systems. The new lipids were shown to be at least equivalent to MePEGA-2000-DSPE in assays designed to evaluate the effectiveness of polymers as steric barrier mols. in liposomes. Liposomes containing 1-5% of ATTA8-DSPE (octamer) showed comparable long circulation behavior relative to PEG-2000-DSPE analogs. Surprisingly, the shorter ATTA4-DSPE (tetramer) appeared to be quite

effective in reducing clearance. Liver enzyme levels and systemic single dose tolerability of ATTA8-DSPE liposomes were comparable to controls, suggesting that the new materials are nontoxic. Prolonged exposure of ATTA8-DSPE liposomes to splenocytes in vitro showed no evidence of mitogenicity relative to controls or MePEGA-2000-DSPE liposomes. ATTA8-DSPE was as effective as MePEGC-2000-DSPE in preventing complement activation by cationic liposome systems. Repeat dosage in vivo regimes in ICR mice using DSPC/cholesterol liposomes, with and without 5% ATTA8-DSPE and MePEGC-2000-DSPE, showed no evidence of enhanced clearance on successive doses. Splenocytes recovered after repeat doses showed no significant evidence of mitogenicity on restimulation with liposomes. Cellular differentiation and activation marker levels in splenocytes recovered after the fourth in vivo administration were at normal levels. These results suggest that ATTAn oligomers do not induce an immune response in isolation. It was demonstrated that ATTA8-DSPE could be used to replace PEG-lipids in the formulation of doxorubicin, plasmid DNA and oligonucleotides using a variety of formulation techniques. The study demonstrates that ATTAn oligomers can be safely and effectively used in place of poly(ethylene glycol) as well-defined biomaterials in liposomal applications where reproducible behavior is critical

IT 195071-49-9D, oligomers

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(application of 14-amino-3,6,9,12-tetraoxatetradecanoic acid oligomers in lipid conjugates as steric barrier mols. in liposomes) 195071-49-9 CAPLUS

RN 195071-49-9 CAI

N Acetic acid, 2-[2-[2-[2-(2-aminoethoxy)ethoxy]ethoxy]- (CA INDEX NAME)

H2N-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CO2H

IT 229645-63-0P 229645-64-1P 229645-65-2P 229645-74-3P 229645-75-4P 236103-97-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(application of 14-amino-3,6,9,12-tetraoxatetradecanoic acid oligomers in lipid conjugates as steric barrier mols. in liposomes)

RN 229645-63-0 CAPLUS

CN 5,8,11,14,20,23,26,29,35,38,41,44,50,53,56,59,65,68,71,74,80,83,86,89,95,9
8,101,104-Octacosaoxa-2,17,32,47,62,77,92-heptaazahexahectanamide,
1-[[2-[2-[2-[2-azidoethoxy]ethoxy]ethoxy]ethoxy]methy1]1,16,31,46,61,76,91-heptaoxo-N,N-ditetradecyl- (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 229645-64-1 CAPLUS

CN 5,8,11,14,20,23,26,29,35,38,41,44,50,53,56,59,65,68,71,74,80,83,86,89,95,9
8,101,104-Octacosaoxa-2,17,32,47,62,77,92-heptaazahexahectanamide,
1-[2-[2-[2-(2-azidoethoxy)ethoxy]ethoxy]ethoxy]methyl]-N,N-dihexadecyl1,16,31,46,61,76,91-heptaoxo- (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 229645-65-2 CAPLUS

CN Tetradecanoic acid, 1-(131-azido-3,18,33,48,63,78,103,118-octaoxo-5,8,11,14,02,33,26,29,35,38,41,44,50,53,56,59,65,68,71,74,90,93,96,99,105,108,111,114,120,123,126,129-dotriacontaoxa-2,17,32,47,62,77,102,117-octaazahentriacontahect-1-y1)-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

<sup>\*\*\*</sup> STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 229645-74-3 CAPLUS

- CN Hexadecanoic acid, 1-(131-azido-3,18,33,48,63,78,103,118-octaoxo-5,8,11,14,20,23,26,29,35,38,41,44,50,53,56,59,65,68,71,74,90,93,96,99,105,108,111,114,120,123,126,129-dotriacontaoxa-2,17,32,47,62,77,102,117-octaazahentriacontahect-1-yl)-1,2-ethanediyl ester (9CI) (CA INDEX NAME)
- \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*
- RN 229645-75-4 CAPLUS
- CN Octadecanoic acid, 1-(131-azido-3,18,33,48,63,78,103,118-octaoxo-5,8,1,1,4,20,2,3,6,29,35,84,14,44,90,53,56,59,56,87,17,49,9,93,96,99,105,108,111,114,120,123,126,129-dotriacontaoxa-2,17,32,47,62,77,102,117-octaazahentriacontabect-1-v1)-1,2-dthanedivl ester (9CI) (CA INDEX NAME)
- \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*
- RN 236103-97-2 CAPLUS
- CN Octadecanoic acid, (1R)-1-(65-azido-3-hydroxy-3-oxido-7,22,37,52-tetraoxo-2,4,9,12,15,18,24,27,30,33,39,42,45,48,54,57,60,63-octadecaoxa-6,21,36,51-tetraaza-3-phosphapentahexacont-1-y1)-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

## Absolute stereochemistry.

PAGE 1-A

$$N_3$$

PAGE 1-B

PAGE 1-C

Me-\_\_

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD

(8 CITINGS)

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:804207 CAPLUS

DOCUMENT NUMBER: 130:57210

TITLE: Use of drug carriers for producing lymph node

migrating drugs
INVENTOR(S): Horie, Kazutoshi; Masuda, Kazuyoshi; Sakagami,

Masahiro

PATENT ASSIGNEE(S): Shionogi & Co., Ltd., Japan SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.				KIND DATE			APPLICATION NO.				DATE						
	WO 9855149																	
				A1 19981210			WO 1998-JP2373				19980529							
		W:	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
			DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	GW,	HU,	ID,	IL,	IS,	JP,	KE,	KG,
			KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,
			NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TR,	TT,	UA,
			UG,	US,	UZ,	VN,	YU,	ZW										
		RW:	GH,	GM,	KΕ,	LS,	MW,	SD,	SZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,
			FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ΒJ,	CF,	CG,	CI,
								NE,										
AU 9874545				A		1998	1221	1 AU 1998-74545				19980529						
PRIO	PRIORITY APPLN. INFO.:									JP 1997-145011				- 2	A 19970603			
											WO 1	998-	JP23	73	1	7 1	9980	529

- AB The invention relates to the use of drug carriers represented by the following general formula for producing lymph node migrating drugs: E-(T1-T2-F)p, wherein E represents a polysaccharide such as CM chitosan, CM pullulan or CM dextran or a deriv. thereof; T1 represents -NH-, -NHCO-, -CONH- or -NHCONH-; T2 represents -CHZCH2(COCRE2)m-, -(CH2)n-, etc.; F represents a monosaccharide optionally N- or O-acylated, O-alkylated or esterified, or an oligosaccharide consisting of 2 to 6 mols. of the monosaccharide or is deriv.; and p is an integer of from 0 to 1,000.
- II 217180-84-2P 217180-86-4P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
- (use of drug carriers for producing lymph node migrating drugs)  ${\tt RN} \quad 217180-84-2 \quad {\tt CAPLUS}$
- NN 2/1600-32 CAFL000
  CAFL00
  5,8,11,14,17-Pentaoxa-2-azanonadecanedioic acid, 1-(1,1-dimethylethyl)
  19-[(1R,2S,3R,4S,6E)-1-[[(2R,3R)-3-ethyl-3,6-dihydro-6-oxo-2H-pyran-2-yl]methyl]-3-methoxy-2,4-dimethyl-6-octen-1-yl] ester (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

PAGE 1-A

PAGE 1-B

RN 217180-86-4 CAPLUS CN 3.6.9.12.15-Pentage

3,6,9,12,15-Pentaoxaheptadecanoic acid, 17-amino-, (1R,2S,3R,4S,6B)-1-[[(2R,3R)-3-ethy1-3,6-dihydro-6-oxo-2H-pyran-2-yl]methyl]-3-methoxy-2,4-dimethyl-6-octenyl ester, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 217180-85-3 CMF C31 H55 N O10

Absolute stereochemistry. Double bond geometry as shown.

PAGE 1-A

PAGE 1-B

CM 2

CRN 76-05-1 CMF C2 H F3 O2

IT 217180-85-3DP, reaction products with carboxymethylpullulan RI: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (use of drug carriers for producing lymph node migrating drugs)

RN 217180-85-3 CAPLUS CN 3,6,9,12,15-Pentaox

3,6,9,12,15-Pentaoxaheptadecanoic acid, 17-amino-, (1R,2S,3R,4S,6E)-1-[((2R,3R)-3-ethyl-3,6-dihydro-6-oxo-2H-pyran-2-yl]methyl]-3-methoxy-2,4-dimethyl-6-octen-1-yl ester (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-B

NH2

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 23 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:682650 CAPLUS

DOCUMENT NUMBER: 130:62859

TITLE: Inhibiting the dimerization of HIV-1 protease
AUTHOR(S): Zutshi, Reena; Shultz, Michael D.; Ulysse, Luckner;

Lutgring, Ray; Bishop, Patricia; Schweitzer, Barbara; Vogel, Karen; Franciskovich, Jeff; Wilson, Matt;

Chmielewski, Jean

CORPORATE SOURCE: Department Chemistry, Purdue University, West

Lafayette, IN, 47907, USA SOURCE: Synlett (1998), (10), 1040

Synlett (1998), (10), 1040-1044 CODEN: SYNLES; ISSN: 0936-5214

PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

Disrupting protein-protein interactions in multi-subunit enzymes is AB currently an under-utilized mode of inhibition, and little information exists to assist the researcher in the design of agents to effect such a change within the enzyme. These limitations were addressed by providing a general strategy for the design of dimerization inhibitors of the therapeutically significant enzyme HIV-1 protease. A successful approach to the design of dimerization inhibitors of HIV-1 protease was demonstrated. Using peptides of the dimerization interface as a starting point for inhibitor design, the authors found that the activities of the interfacial peptides were enhanced through crosslinking, and that the nature of the crosslinking was essential for high efficacy. We found for this class of inhibitors the terminal, aromatic residues were essential components for inhibition, and that modifications of these residues based on an anal. of their binding site in an HIV-1 protease monomer could lead to further enhancements in efficacy.

IT 217810-42-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of dimerization inhibitors for HIV-1 proteinase)

RN 217810-42-9 CAPLUS

CN L-Tryptophan, 1-(13-carboxy-1-oxo-3,6,9,12-tetraoxatridec-1-y1)-L-proly1-L-glutaminyl-L-isoleucyl-L-threonyl-L-leucyl-, (1-1')-amide with L-seryl-L-threonyl-L-leucyl-L-asparaginyl-L-phenylalanine (9CI) (CA INDEX NAME)

## Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

OS.CITING REF COUNT: THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 24 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER:

1998:585745 CAPLUS 129:277693

DOCUMENT NUMBER: ORIGINAL REFERENCE NO.:

129:56591a,56594a

TITLE:

Bleach activators and bleach compositions containing the same, showing high bleaching powder for both

APPLICATION NO.

DATE

hydrophilic and hydrophobic soils without discoloring the substrate

KIND DATE

INVENTOR(S):

Yokoi, Kenji; Nakagawa, Ryuichi

PATENT ASSIGNEE(S):

Lion Corp., Japan Jpn. Kokai Tokkyo Koho, 19 pp.

SOURCE:

DOCUMENT TYPE:

CODEN: JKXXAF Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT NO.

PATENT INFORMATION:

JP 10237497	A	19980908	JP 1997-39051	19970224
PRIORITY APPLN. INFO.:			JP 1997-39051	19970224
AB The title bleach a	ctivator	s contain ≥	1 R2[N(COR1)Q]2 (I),	
R2(CONR4Q)2, R2[OC	H2CH(R6)	00]2, and R	2 [OCH2CH (CH2OR8) OQ] 2	2, wherein Q =
(C2H4O) 1 (AO) mCH (R3	3) (CH2) nC	OL, $R1 = C1$	-21 alkyl, alkenyl,	phenyl; R2 =
C1-10 alkylene; R3	B = H, C1	-10 alkyl, a	alkenyl, hydroxyalky	1; R4, R6, R8 =
C1-22 alkyl, alker	yl, phen	y1; A = C2-4	4 alkylene; $1$ , $m = 0$	)-20; n 0-12; L =
H, OC6H4SO3M; OC6F	14CO2M, N	H(CH2)rCO2C	5H4SO3M, NH(CH2)rCO2	C6H4CO2M, C3-12
lactonyl, 3-Y-subs	stituted :	2,5-dioxote	trahydropyrrolyl, ex	cluding both L
being $H; r = 1-11;$	x = 2-1	1; Y = H, SC	O3M, $CO2M$ ; $M = H$ , al	lkali metal, alkaline
earth metal, ammor	ium. I	(R1 = C7H15)	R2 = C2H4OC2H4; R3	B = H; 1 = 5.9; m
= 0; n = 1; L = 00	6H4S03Na	) was used t	with Na percarbonate	

ΙT 213693-39-1 213693-40-4 213693-49-3

213693-50-6

RL: NUU (Other use, unclassified); USES (Uses)

(bleach activators and bleach compns. containing the same, showing high bleaching powder for both hydrophilic and hydrophobic soils without discoloring the substrate)

RN 213693-39-1 CAPLUS

CN 10,13,16,19,22-Pentaoxa-7,25-diazahentriacontanedioic acid, 11,21-dioctyl-8,24-dioxo-, 1,31-bis(4-sulfophenyl) ester, sodium salt (1:2) (CA INDEX NAME)

●2 Na

- RN 213693-40-4 CAPLUS
- CN 10,13,16,19-Tetraoxa-7,22-diazaoctacosanedioic acid,
  - 11,18-dioctyl-8,21-dioxo-, bis(4-carboxyphenyl) ester, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

●2 Na

PAGE 1-B

- RN 213693-49-3 CAPLUS
- CN 10,13,16,19-Tetraoxa-7,22-diazaoctacosanedioic acid,
  - 11,18-bis[(octyloxy)methyl]-8,21-dioxo-, 1,28-bis(4-sulfophenyl) ester, sodium salt (1:2) (CA INDEX NAME)

2 Na

PAGE 1-B

213693-50-6 CAPLUS RN

CN 10,13,16,19-Tetraoxa-7,22-diazaoctacosanedioic acid, 11,18-bis[(octyloxy)methyl]-8,21-dioxo-, bis(4-carboxyphenyl) ester, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

2 Na

PAGE 1-B

L5 ANSWER 25 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN 1998:498186 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

129:204465

ORIGINAL REFERENCE NO.:

129:41499a,41502a

TITLE:

Cleaning agent compositions based on amide ether

carboxylic acid salts

INVENTOR(S): Ota, Atsushi; Akasaki, Sayumi

PATENT ASSIGNEE(S): Sanyo Chemical Industries Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Pat.ent. LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10204493	A	19980804	JP 1997-20093	19970117
JP 2964226	B2	19991018		

PRIORITY APPLN. INFO.: JP 1997-20093 Title cleaning compns., suitable for shampoo and body shampoo, comprise

70-97 weight% of amide ether carboxylic acid salt R1CONHCHR2CH2O(AO)nCH2CO2M (R1 = C6-24 fatty acid residue; R2 = H, C1-4 alkyl; A = C2-4 alkylene; n = 0-20; M = H, alkali metal, alkali earth metal, ammonium, low alkanolamine cation, basic amino acid cation), 2.5-15 weight% of polyoxyalkylene fatty acid alkanol amide R1CONHCHR2CH2O(AO)nH, 0.1-10 weight% of R1CO2M, and 0.005-5 weight% of oxy acids and/or their salts.

186907-11-9

RL: TEM (Technical or engineered material use); USES (Uses)

(cleaning agent compns. based on amide ether carboxylic acid salts) 186907-11-9 CAPLUS

RN

CN 3,6,9,12-Tetraoxa-15-azaheptacosanoic acid, 16-oxo-, potassium salt (1:1) (CA INDEX NAME)

PAGE 1-A HO2C-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-NH-C

K

PAGE 1-B

- (CH2)10-Me

L5 ANSWER 26 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:446868 CAPLUS DOCUMENT NUMBER: 129:189581 ORIGINAL REFERENCE NO.: 129:38517a,38520a

TITLE: Ligand Recognition by E- and P-Selectin: Chemoenzymic Synthesis and Inhibitory Activity of Bivalent Sialyl

Lewis x Derivatives and Sialyl Lewis x Carboxylic Acids

Wittmann, Valentin; Takayama, Shuichi; Gong, Ke Wei; AUTHOR(S): Weitz-Schmidt, Gabriele; Wong, Chi-Huey

Department of Chemistry and The Skaggs Institute for CORPORATE SOURCE: Chemical Biology, Scripps Research Institute, La

Jolla, CA, 92037, USA SOURCE:

Journal of Organic Chemistry (1998), 63(15), 5137-5143

CODEN: JOCEAH; ISSN: 0022-3263 PUBLISHER: American Chemical Society

Journal DOCUMENT TYPE: LANGUAGE: English

## CASREACT 129:189581

OTHER SOURCE(S):

AB Described is the preparation of five sialyl Lewis x (sLex) dimers and five sLex carboxylic acids by coupling chemoenzymically synthesized amino-substituted sLex to homo-bifunctional cross-linkers of varying chain length. The products were assayed for inhibition against binding of a slea-polymer to immobilized E- and P-selectin. In the E-selectin assay all dimers had lower IC50 values than the slex monomer. The results show that comparable binding enhancements can be obtained with linkers of completely different length and rigidity. In the P-selectin assay four of the five slex carboxylic acids displayed significantly improved inhibitory potency. The lowest IC50 value was observed for the compound with the shortest spacer between the slex modety and the addnl. carboxylate, being ca. 20-40 times more potent than unmodified slex. These findings should be of importance for the design of new multivalent forms of slex as well as slex mimetics as high-affinity selectin liquads.

IT 211746-89-3P 211746-90-6P 211746-91-7P 211746-92-8P 211746-93-9P 211746-94-0P

211746-96-2P 211746-97-3P

RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (chemoenzymic synthesis and E- and P-selectin inhibitory activity of bivalent sialvl Lewis x derivs.)

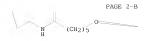
RN 211746-89-3 CAPLUS

CN 3,6,9,12-Tetraoxatetradecanediamide,

3,0,3,12-let-loadacterlated-enlet-aminosyl)-(2+3)-0-β-D-galactopyranosyl-(1+4)-0-[6-deoxy-α-L-galactopyranosyl-(1+4)-0-[6-deoxy-α-L-galactopyranosyl-(1+3)]-2-(acety)-amino)-2-deoxy-β-D-glucopyranosyl]oxyl-1-oxohexyl-amino)-ethul-(9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-C



RN 211746-90-6 CAPLUS

CN 3,6,9,12-Tetraoxa-15,18-diazatetracosanoic acid,
24-[IO-(N-acetyl-\alpha-neuraminosyl-(2-3)-O-B-Dgalactopyranosyl-(1-4)-O-[6-deoxy-\alpha-1-galactopyranosyl(1-3)]-2-(acetylamino)-2-deoxy-B-D-glucopyranosyl)oxy]- (9CI)
(CA INDEX NAME)

RN 211746-91-7 CAPLUS

CN 3,6,9,12,15-Pentaoxaheptadecanediamide, N,N'-bis[2-[6-[0-(N-acety]- $\alpha$ -neuraminosyl)-(2-3)-0- $\beta$ -D-galactopyranosyl-(1-4)-0-[6-deoxy- $\alpha$ -L-galactopyranosyl-(1-3)]-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl]oxohexyl]amino]-2-deoxyl (CA INDEX NAME)

RN 211746-92-8 CAPLUS

CN 3,6,9,12,15-Pentaoxa-18,21-diazaheptacosanoic acid,
27-[IO-(N-acetyl-α-neuraminosyl)-(2+3)-O-B-Dgalactopyranosyl-(1+4)-O-[6-deoxy-α-L-galactopyranosyl(1+3)]-2-(acetylamino)-2-deoxy-B-D-glucopyranosyl)oxy](CA INDEX NAME)

PAGE 1-A

RN 211746-93-9 CAPLUS

CN 3,6,9,12,15,18-Hexaoxaeicosanediamide, N,N'-bis[2-[[6-[[0-(N-acetyl-α-neuraminosyl)-(2-3)-0-β-D-galactopyranosyl-(1-4)-0-[6-deoxy-α-L-galactopyranosyl-(1-3)]-2-(acetylamino)-2-deoxy-B-D-glucopyranosyl)oxyl-1-oxohexyl]amino]-byl-[0-(5) (CA INDEX NAME)

PAGE 1-A

PAGE 1-C



RN 211746-94-0 CAPLUS

CN 3,6,9,12,15,18-Hexaoxa-21,24-diazatriacontanoic acid,
30-[IO-(N-acetyl-\alpha-neuraminosyl)-(2+3)-O-\beta-Dgalactopyranosyl-(1+4)-O-[6-deoxy-\alpha-L-galactopyranosyl(1+3)]-2-(acetylamino)-2-deoxy-\beta-D-glucopyranosyl)oxy](CA INDEX NAME)

PAGE 1-A

PAGE 1-C

- CO2H

RN

211746-96-2 CAPLUS 3,6,9,12,15,18,21-Heptaoxatricosanediamide, CN  $N, N'-bis[2-[6-[0-(N-acetyl-\alpha-neuraminosyl)-(2\rightarrow3)-0-\beta-D \begin{array}{lll} \texttt{galactopyranosyl-}(1\rightarrow 4) & -0 - [6-\texttt{deoxy-}\alpha-\texttt{L-galactopyranosyl-}(1\rightarrow 3)] -2 - (\texttt{acetylamino}) -2 - \texttt{deoxy-}\beta-\texttt{D-glucopyranosyl}] \texttt{oxy}] -1 - \end{array}$ oxohexyl]amino]ethyl]- (9CI) (CA INDEX NAME)

PAGE 1-C

RN 211746-97-3 CAPLUS

CN 3,6,9,12,15,18,21-Heptaoxa-24,27-diazatritriacontanoic acid, 33-[(O-(N-acety1-a-neuraminosy1)-(2-3)-O-B-Dgalactopyranosy1-(1-4)-O-[6-deoxy-a-L-galactopyranosy1(1-3)]-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl]oxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 1-C

OS.CITING REF COUNT: 32 THERE ARE 32 CAPLUS RECORDS THAT CITE THIS RECORD (33 CITINGS)

REFERENCE COUNT: 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 27 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1998:212246 CAPLUS

DOCUMENT NUMBER: 128:286280 ORIGINAL REFERENCE NO.: 128:56585a,56588a

TITLE: Synthesis and characterization of

polymer-(multi)-peptide conjugates for control of

specific cell aggregation

AUTHOR(S): Belcheva, Nadya; Baldwin, Samuel P.; Saltzman, W. Mark
CORPORATE SOURCE: Sch. of Chem. Eng., Cornell Univ., Ithaca, NY, 14853,

USA

SOURCE: Journal of Biomaterials Science, Polymer Edition (1998), 9(3), 207-226

CODEN: JBSEEA; ISSN: 0920-5063

PUBLISHER: VSP BV
DOCUMENT TYPE: Journal
LANGUAGE: English

A new synthetic approach has been applied to obtain novel di-, tetra-, and multipeptide-containing polymer conjugates in quant. yields with a high degree of conjugation. Bis(N-hydroxysuccinimidyl) esters of PEG (Mw = 200, 600, 1400, 2000, and 3400) were synthesized and studied in a condensation reaction with synthetic peptides: glycine-glycine-tyrosine-arginine (GGYR), a model peptide, and glycine-arginine-glycine-aspartic acid-tyrosine (GRGDY), a sequence known to promote cell adhesion and aggregation. Tetrasubstituted derivs. of PEG-based conjugates were synthesized by coupling L-aspartic acid and L-aspartyl-L-phenylalanine through a condensation procedure in organic media. Acrylic acid polymers (Mw = 2000 and 5000) were studied as a model of multifunctional linear polymers in the reaction with L-tryptophan and GGYR. Alternative polymer-(multi)-peptide conjugates were successfully synthesized using a polyamino-polyamide starburst dendrimer PAMAM (G = 3), 'short' and 'long'-chain PEG-based active esters and GRGDY. The structure of the intermediate precursors and peptide-conjugates was confirmed by spectral (UV-visible, FTIR, 1H-NMR) and chromatog. (RP-HPLC and SEC) methods. By varying the properties of the interconnecting polymer - such as hydrophobicity, mol. weight, and functionality - a set of polymer-GRGDY conjugates was synthesized.

IT 205874-57-3P 205874-58-4P 205874-59-5P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and properties of polymer-peptide conjugates for cell aggregation control)

RN 205874-57-3 CAPLUS

CN L-Arginine, 1,1'-(1,14-dioxo-3,6,9,12-tetraoxatetradecane-1,14-div1)bis[glvcvlglvcvl-L-tvrosvl- (9CI) (CA INDEX NAME)

PAGE 1-C

RN 205874-58-4 CAPLUS
CN L-Tyrosine, 1,1'-(1,14-dioxo-3,6,9,12-tetraoxatetradecane-1,14-diyl)bis[g]ycyl-L-arginylg]ycyl-L-a-aspartyl- (9CI) (CA INDEX NAME)

PAGE 1-C

RN

CN

205874-59-5 CAPLUS L-Tyrosine, N-(17-hydroxy-16-methyl-1,14-dioxo-3,6,9,12-tetraoxa-15-azaheptadec-1-yl)glycyl-L-arginylglycyl-L-a-aspartyl-, 1,1'-diether with  $\alpha$ -hydro-w-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

$$\begin{array}{c} {\tt O} \\ {\tt O} \\ {\tt ||} \\ {\tt -C-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-C-NH-CH-} \end{array}$$

PAGE 1-C

PAGE 1-D (CH2)3-NH-C-NH2 - C- NH- CH2- C- NH- CH

PAGE 1-E

OS.CITING REF COUNT:

THERE ARE 26 CAPLUS RECORDS THAT CITE THIS RECORD (26 CITINGS)

REFERENCE COUNT:

THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

31 L5 ANSWER 28 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1997:765435 CAPLUS

26

DOCUMENT NUMBER: 128:76867

ORIGINAL REFERENCE NO.: 128:15013a,15016a

Storage-stable cleaning compositions showing less TITLE: trace after wiping for cleaning rigid surface

INVENTOR(S): Tsukuda, Kazunori; Suzuki, Satoru

PATENT ASSIGNEE(S): Kao Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent Japanese

LANGUAGE: FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 09310091 A 19971202 .TP 1996-126996 19960522 PRIORITY APPLN. INFO.: JP 1996-126996 19960522

OTHER SOURCE(S): MARPAT 128:76867

Title compns., useful for cleaning bathrooms, toilet bowls, kitchens, etc., comprise (A) MO2CCHRN(CH2CO2M)2 (I; R = C1-18 alkyl, alkenyl; M = H, Na, K, NH4) or their salts 0.1-30, (B) surfactants 0.1-30, and (C) H2O-soluble solvents 0.1-50% at B/C ratio 5/1 to 1/50. Thus, a composition comprising I (R = Me; M = Na) 3, decyltrimethylammonium chloride 4, diethylene glycol monobutyl ether 5, and H2O to 100% showed good detergency and storage stability.

200558-86-7

RL: TEM (Technical or engineered material use); USES (Uses) (storage-stable compns. containing alkylglycine diacetates and surfactants

for cleaning rigid surface)

RN 200558-86-7 CAPLUS

CN Propanoic acid, 2-oxo-3-[(13-oxo-3,6,9-trioxa-12-azatetracos-1-y1)oxy]-, sodium salt (1:1) (CA INDEX NAME)

PAGE 1-A

HO2C- C-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-NH-

Na

PAGE 1-B

(CH<sub>2</sub>)<sub>10</sub>-Me

L5 ANSWER 29 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN

1997:731708 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 128:39384 ORIGINAL REFERENCE NO.: 128:7639a,7642a

TITLE: Liquid- or paste-type pearly cleanser compositions containing amido ether derivatives and (poly)alkylene

glycol fatty acid esters

INVENTOR(S): Isobe, Kazuo

PATENT ASSIGNEE(S): Kao Corp., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. ----19971111 JP 1996-102450 19960424 JP 09291017 PRIORITY APPLN. INFO.: JP 1996-102450

MARPAT 128:39384 OTHER SOURCE(S):

Liquid- or paste-type pearly cleanser compns. contain amido ether derivs. and (poly)alkylene glycol fatty acid esters. The compns. show high-temperature stability and good appearance. A shampoo contained POE lauryl ether sulfate sodium salt 16, coco fatty acid amidopropylbetaine 3, cationic guar gum 0.2, stearyltriammonium chloride 0.1, amido ether derivs., alkylene glycol fatty acid esters and ion-exchanged water to 100 weight%.

170023-47-9 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(liquid- or paste-type pearly cleanser compns. containing amido ether derivs.

and polvalkylene glycol fatty acid esters)

170023-47-9 CAPLUS

CN 3,6,9,12-Tetraoxa-15-azaheptacosanoic acid, 16-oxo-, sodium salt (1:1) (CA INDEX NAME)

PAGE 1-A

HO 2 C - CH2 - O - CH2 - CH2 - NH - C -

Na

PAGE 1-B

- (CH2)10-Me

L5 ANSWER 30 OF 82 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:618994 CAPLUS DOCUMENT NUMBER: 127:294996 ORIGINAL REFERENCE NO.: 127:57635a,57638a

TITLE: Liquid detergent compositions containing amide ether

carboxylic acids and amide ethers

INVENTOR(S): Nakagaki, Kiyoko; Sekiguchi, Takashi; Nozaki, Toshio

PATENT ASSIGNEE(S): Kao Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

JP 09241679	A	19970916	JP 1996-47165	19960305
PRIORITY APPLN. INFO.:			JP 1996-47165	19960305
OTHER SOURCE(S):	MARPA	T 127:294996		
AB The title compns.	with pH	7.0-9.3, sh	owing good foamabili	ty to give
skin-compatible cr	eamy fo	am, contain	(A) ≥50%-solids 99:1	-10:90
mixts. of R1CONR2(	CH2CH2O	)nCH2CO2M (s	alts) and R1CONR3(CH	2CH2O)nH containing
≤5% R4OCH2CHOR4CH2	OR4 [R1	= C5-23 lin	ear or branched alky	1,
alkenvl, alk(en)vl	-substi	tuted Ph; R2	= H, (CH2CH2O)nCH2C	O2M, (CH2CH2O)mH,
				monium, alkanolamine,
			; R3 = (CH2CH2O)mH,	
			B) fatty acid (salts	
			Me laurate and 1.02	
			MeOH in vacuo at 90°	
			at 100-110° to give	
				1CH2CO2Na in alkaline
			1H23CONH(CH2CH2O)3CH	
				n, pH 8.2) comprising
CTTHESCOMI (CHECHEC	// JII+ A	COMPOSICION	(30 aqueous solution	ii, pii 0.2) comprisiing

PATENT NO. KIND DATE APPLICATION NO. DATE

balance H20 showed good foamability in washing body.

T 175699-67-9P 175699-68-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

the above mixture, 2% lauric acid, 1.05% KOH (48% aqueous solution) and

(liquid detergents containing mixts. of amide ether carboxylic acids and amide ethers showing good foamability)

RN 175699-67-9 CAPLUS

8% of

CN 3,6,9,12,15-Pentaoxa-18-azatriacontanoic acid, 19-oxo-, sodium salt (1:1) (CA INDEX NAME)

PAGE 1-A

Na

PAGE 1-B

RN 175699-68-0 CAPLUS

CN 3,6,9,12,15,18-Hexaoxa-21-azapentatriacontanoic acid, 22-oxo-, sodium salt (1:1) (CA INDEX NAME) HO2C-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-O-CH2-O-CH2-O-

Na

PAGE 1-B

Ĭ

—  ${
m CH}_2-{
m CH}_2-{
m O}-{
m CH}_2-{
m CH}_2-{
m NH}-{
m C}-{
m (CH}_2)_{12}-{
m Me}$ 

=> s 15 and spacer 66090 SPACER

L6 9 L5 AND SPACER

=> d 16 ibib abs hitstr 1-

YOU HAVE REQUESTED DATA FROM 9 ANSWERS - CONTINUE? Y/(N):y

L6 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:708816 CAPLUS

DOCUMENT NUMBER: 137:247925

TITLE: Preparation of peptide nucleic acid (PNA) containing

fluorescence and/or biotin-labeled puromycin

derivatives as their use for C-terminus monomolecular labeling of proteins

INVENTOR(S): Sasaki, Akira; Nemoto, Naoto

PATENT ASSIGNEE(S): Gencom Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GI

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002265492	A	20020918	JP 2001-65257	20010308
PRIORITY APPLN. INFO.:			JP 2001-65257	20010308
OTHER SOURCE(S):	MARPAT	137:247925		

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Puromycin derivs. [I; R = R1-L1-, X-L3-L2-L1-, X-L3-L2-L1-; wherein L1, L3, X1-L8-L7-L6-CH\_(L-5-L9-L10-L11-L12-L1]-L3-L2-L1-; wherein L1, L3, L6, L9, L11, L13 = a spacer; L2, L4, L5, L7, L10, L12 = a linkage group; R1 = a reactive group; Nu = pyrimidine or purine base residue such as cytosine; X1, X2 = a residue of a labeling substance such as a fluorescence substance] are prepared Also disclosed are protein or nucleic acid or derivative thereof containing the compound I or its salt as the

constituent component. Claimed is a method for preparation of modified protein or nucleic acid involving a process of allowing the compound I or its salt to be taken up into the protein or nucleic acid. The present patent establishes the efficient synthesis of puromycin derivs, which are used to efficiently label protein at the C-terminus, and a method for forming a complex of nucleic acid and a protein coded by the nucleic acid using the puromycin derivs. A protein introduced with the puromycin derivative I is typically prepared by introducing RNA (preferably mRNA) coding the protein and the promycin derivative I into a transcription system and transcribing RNA into protein. Thus, N-trifluoroacetylation of puromycin by trifluoroacetic anhydride in pyridine/MeCN followed by tosylation with tosyl chloride in pyridine ave Na-trifluoroacetyl-5'-O-tosyl puromycin which underwent axidolysis with NaN3 in DNSO at room temperature for

days to give Nu-trifluoroacetyl-5'-azido-5'-deoxy puromycin (II). Reduction of II to Nu-trifluoroacetyl-5'-amino-5'-deoxy puromycin by treatment with Ph3P and H2O in pyridine followed by condensation with Nn-[2-(4-methoxytritylamino)ethyl]-N-[N4-(4-tert-butylbenzoyl)cytosin-1-ylacetyl]dycine pentafluorophenyl ester in 0.15 M NaHGO3/NA2CO3 buffer and deprotection with NH3 in aqueous BtOH and then with CF3CO2H gave I (R = H2N-CH2CE2, Nu = cytosin-1-yl) which was condensed with Fluorolink Mono Reactive Dye Cy5 to give I (R = Q) (Cy5-C-amPu). MRNA coding green fluorescein protein (GFF) (1  $\mu$ g) and 10  $\mu$ M I (R = Q) were added to 50  $\mu$ L of a wheat germ noncellular translation system (Promega) and allowed to react for 1 h. It was confirmed by separation of the protein using SDS-polyacrylamide electrophoresis and detecting the both fluorescein from I (R = Q) and GFF that the GFP synthesized was labeled by I (R = Q).

RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of peptide nucleic acid (PNA) containing fluorescence and/or biotin-labeled puromycin derivs. as use for C-terminus monomol. labeling of proteins and nucleic acids by translation of RNA into proteins

RN 459426-24-5 CAPLUS

3

CN Adenosine,  $3'-[(12S)-2-amino-3-(4-methoxyphenyl)-1-oxopropyl)amino]-5'-[[(14-amino-2-oxo-1(2H)-pyrimidinyl)acetyl][2-[(N-[21-[(3aS,48,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]midazo1-4-yl]-1,17-dioxo-4,7,10,13-tetraoxa-16-azaheneicos-1-yl]-<math>\beta$ -alanyl-N6-[6-[2-[(1E,3E,5E)-5-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1,3-pentadienyl]-3,3-dimethyl-5-sulfo-3H-indolio]-1-oxohexyl]-L-lysyl- $\beta$ -alanyl]amino]ethyl]amino]acetyl]amino]-3',5'-dideoxy-N,N-dimethyl-, innersalt (9C1) (CA INDEX NANE)

Absolute stereochemistry. Double bond geometry as shown.

IT 459426-22-3, (+)-Biotin-PEO4-NHS-propionate

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of peptide nucleic acid (PNA) containing fluorescence and/or biotin-labeled puromycin derivs. as use for C-terminus monomol. labeling of proteins and nucleic acids by translation of RNA into proteins)

RN 459426-22-3 CAPLUS

CN 4,7,10,13-Tetraoxa-16-azaheneicosanoic acid,

21-[(3aS, 4S, 6aR)-hexahydro-2-oxo-1H-thieno[3, 4-d]imidazol-4-yl]-17-oxo-,

2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



IT 459426-23-4P 459426-25-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of peptide nucleic acid (PNA) containing fluorescence and/or biotin-labeled puromycin derivs. as use for C-terminus monomol. labeling of proteins and nucleic acids by translation of RNA into proteins)

RN 459426-23-4 CAPLUS

CN Adenosine, 3'-[(2S)-2-amino-3-(4-methoxyphenyl)-1-oxopropyl]amino]-5'[[((4-amino-2-oxo-1(2H)-pyrimidinyl)acetyl][2-[[N-[21-(3aS, 4S, 6aR)-hexahydro-2-oxo-1H-thieno[3, 4-d] imidazol-4-yl]-1,17-dioxo-4,7,10,13tetraoxa-16-azaheneicos-1-yl]-B-alanyl-L-lysyl-Balanyl]amino]ethyl]amino]acetyl]amino]-3',5'-dideoxy-N,N-dimethyl- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-C

RN 459426-25-6 CAPLUS

CN Adenosine, 3'-[[(2S)-2-amino-3-(4-methoxyphenyl)-1-oxopropyl]amino]-5'[[[(4-amino-2-oxo-1(2H)-pyrimidinyl)acetyl][2-[[N-[21-[(3S,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazo1-4-yl]-1,17-dioxo-4,7,10,13-tetraoxa-16-azaheneicos-1-yl]-B-alanyl-N6-[(1,1-dimethylethoxy)carbonyl]-1-lysyl-B-alanyl]amino]ethyl]amino]ethyl]amino]-3',5'-dideoxy-N,N-dimethyl-(9CI)(CA INDEX NAME)

PAGE 1-C

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L6 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:266161 CAPLUS

DOCUMENT NUMBER: 137:29586

TITLE: Replacement of the intervening amino acid sequence of

a Syk-binding diphosphopeptide by a nonpeptide

spacer with preservation of high affinity AUTHOR(S):

Dekker, Frank J.; de Mol, Nico J.; van Ameijde, Jeroen; Fischer, Marcel J. E.; Ruijtenbeek, Rob;

Redegeld, Frank A. M.; Liskamp, Rob M. J.

CORPORATE SOURCE: Department of Medicinal Chemistry Utrecht Institute of

Pharmaceutical Sciences, Utrecht University, Utrecht, 3508 TB, Neth.

SOURCE: ChemBioChem (2002), 3(2-3), 238-242 CODEN: CBCHFX; ISSN: 1439-4227

PUBLISHER . Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal LANGUAGE: English

A high-affinity compound was constructed by linking two relatively weakly

interacting monophosphorylated peptides by an oligoethylene glycol spacer. To prepare the required spacers, hexa- and tetraethylene

glycol were converted into amino acid superstructures.

Benzotriazol-1-yloxy-tris(dimethylamino)-phosphonium hexafluorophosphate, N, N-diisopropylethylamine, and 9-fluorenylmethyloxycarbonyl amino acids were used for the couplings. The tandem Src homol.-2 (SH2) domain of

murine Syk was cloned, expressed, and purified to determine the affinity of the phosphopeptides and the phosphopeptide hybrids for the Syk tandem SH2

domain. In the surface plasmon resonance (SPR) assay, the peptide

featuring the immunoreceptor tyrosine-based activation motif sequence was extended with an N-terminal 6-aminohexanoic acid moiety to provide a

spacer between the SPR sensor chip and the peptide. The mol. construct with the hexaethylene glycol spacer showed an affinity

comparable to the native diphosphorylated ITAM peptide. The results indicated that a nonpeptide spacer can substitute the

intervening amino acids in the native Syk tandem SH2 domain binding ligand.

437655-98-6P 437655-99-7P

RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (diphosphopeptide analog; oligoethylene glycol derivative spacer

preparation and use in linking monophosphorylated peptides in relation to Svk kinase SH2 domain binding)

RN 437655-98-6 CAPLUS

CN L-Leucinamide, N-acetyl-O-phosphono-L-tyrosyl-L-threonylglycyl-L-leucyl-20amino-3,6,9,12,15,18-hexaoxaeicosanovl-O-phosphono-L-tyrosyl-L-\alphaglutamv1-L-threonv1- (9CI) (CA INDEX NAME)

- RN 437655-99-7 CAPLUS
- NN 47/03/37-7 CARLOS CON L-Leucinamide, N-acetyl-O-phosphono-L-tyrosyl-L-threonylglycyl-L-leucyl-14-amino-3,6,9,12-tetraoxatetradecanoyl-O-phosphono-L-tyrosyl-L-a-glutamyl-L-threonyl- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

IT 391684-35-8P 437655-94-2P 437655-95-3P

437655-96-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; oligoethylene glycol derivative spacer preparation and use in linking monophosphorylated peptides in relation to Syk kinase SH2 domain binding)

- RN 391684-35-8 CAPLUS
- CN 5,8,11,14,17,20-Hexaoxa-2-azadocosanedioic acid, 1,22-bis(1,1-dimethylethyl) ester (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

- RN 437655-94-2 CAPLUS

PAGE 1-A

RN 437655-95-3 CAPLUS

CN 5,8,11,14-Tetraoxa-2-azahexadecanedioic acid, 1-(9H-fluoren-9-ylmethyl) ester (CA INDEX NAME)

PAGE 1-A

HO2C-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-NH-

PAGE 1-B

RN 437655-96-4 CAPLUS

CN 5,8,11,14,17,20-Hexaoxa-2-azadocosanedioic acid, 1-(9H-fluoren-9-ylmethyl) ester (CA INDEX NAME)

PAGE 1-A

HO2C-CH2-O-CH2-CH2-O-CH2-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-

PAGE 1-B

OS.CITING REF COUNT:

THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)

L6 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2001:52907 CAPLUS DOCUMENT NUMBER: 134:277052

18

TITLE:

Cell-surface recognition of biotinylated membrane proteins requires very long spacer arms: an

example from glucose-transporter probes
AUTHOR(S): Hashimoto, Makoto; Yang, Jing; Holman, G
CORPORATE SOURCE: Department of Biology and Biochemistry

Hashimoto, Makoto; Yang, Jing; Holman, Geoffrey D. Department of Biology and Biochemistry, University of Bath, Bath, BA2 7AY, UK

SOURCE: ChemBioChem (2001), 2(1), 52-59

Published in: Angew. Chem., Int. Ed., 40(1)

CODEN: CBCHFX; ISSN: 1439-4227 Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal

PUBLISHER:

LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:277052

Glucose transporters (GLUTS) can be photoaffinity labeled by (diazirinetrifluoroethyl) benzoyl-substituted glucose derivs. and the adduct can be recognized, after detergent solubilization of membranes, by using streptavidin-based detection systems. However, in intact cells recognition of photolabeled GLUTs by avaidin and anti-biotin antibodies only occurs if the bridge between the photoreactive and the biotin moieties has a min of 60-70 spacer atoms. We show that a suitably long bridge can be synthesized with a combination of polyethylene glycol and tartrate groups and that introduction of these spacers generates hydrophilic products that can be cleaved with periodate. Introduction of the very long spacers does not appreciably reduce the

affinity of interaction of the probes with the transport system.

IT 332941-37-4P 332941-54-5P 332941-56-7P
RL: PNU (Preparation, unclassified): RCT (Reactant): PREP (Preparation);

RACT (Reactant or reagent) (reagents with long spacer arms between biotin and photoaffinity label can be used for cell-surface recognition of biotinvlated qlucose transporters)

RN 332941-37-4 CAPLUS

CN D-Glucose, 4-0-[24-carboxy-2-[[4-[3-(trifluoromethyl)-3H-diazirin-3-yl]benzoyl]amino]-4,7,10,13,16,19,22-heptaoxatetracos-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

RN 332941-54-5 CAPLUS

CN D-Glucose, 4-0-[62-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-25,51,58-trioxo-2-[[4-[3-(trifluoromethyl)-3H-diazirin-3-yl]benzoyl]amino]-4,7,10,13,16,19,22,29,32,35,38,41,44,47-tetradecaoxa-26,50,57-triazadohexacont-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 1-D

RN 332941-56-7 CAPLUS CN D-Glucose, 4-0-[(31)

D-Glucose, 4-0-[(31R,32R)-63-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]\text{inidazol-4-yl}-31,32-dihydroxy-25,30,33,59-tetraoxo-2-[(4-[3-(trifluoromethyl)-3H-diazirin-3-yl]benzoyl]amino]-4,7,10,13,16,19,22,37,40,43,46,49,52,55-tetradecaoxa-26,29,34,58-tetraazatrihexacont-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-C

PAGE 1-D

IT 332941-34-1P 332941-35-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(reagents with long spacer arms between biotin and photoaffinity label can be used for cell-surface recognition of

biotinylated glucose transporters)
RN 332941-34-1 CAPLUS

NN D-Glucose, 4-0-[2-[((1,1-dimethylethoxy)carbonyl]amino]-27,27-dimethyl-25oxo-4,7,10,13,16,19,22,26-octaoxaoctacos-1-yl]-2,3:5,6-bis-0-(1methylethylidene)-, 1-(dimethyl acetal) (9CI) (CA INDEX NAME)

RN 332941-35-2 CAPLUS

CN D-Glucose, 4-0-[24-carboxy-2-[[(1,1-dimethylethoxy)carbonyl]amino]-4,7,10,13,16,19,22-heptaoxatetracos-1-yl]- (CA INDEX NAME)

## Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

О СО2Н

OS.CITING REF COUNT: 32 THERE ARE 32 CAPLUS RECORDS THAT CITE THIS RECORD (32 CITINGS)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:446868 CAPLUS DOCUMENT NUMBER: 129:189581

ORIGINAL REFERENCE NO.: 129:38517a,38520a

TITLE: Ligand Recognition by E- and P-Selectin: Chemoenzymic

Synthesis and Inhibitory Activity of Bivalent Sialyl Lewis x Derivatives and Sialyl Lewis x Carboxylic

Acids

AUTHOR(S): Wittmann, Valentin; Takayama, Shuichi; Gong, Ke Wei;

Weitz-Schmidt, Gabriele; Wong, Chi-Huey

CORPORATE SOURCE: Department of Chemistry and The Skaggs Institute for Chemical Biology, Scripps Research Institute, La

Jolla, CA, 92037, USA

SOURCE: Journal of Organic Chemistry (1998), 63(15), 5137-5143

CODEN: JOCEAH: ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 129:189581

AB Described is the preparation of five sialyl Lewis x (sLex) dimers and five sLex carboxylic acids by coupling chemoenzymically synthesized amino-substituted sLex to homo-bifunctional cross-linkers of varying chain

length. The products were assayed for inhibition against binding of a slea-polymer to immobilized E- and P-selectin. In the E-selectin assay all dimers had lower ICSO values than the slex monomer. The results show that comparable binding enhancements can be obtained with linkers of completely different length and rigidity. In the P-selectin assay four of the five slex carboxylic acids displayed significantly improved inhibitory potency. The lowest ICSO value was observed for the compound with the shortest spacer between the slex moiety and the addnl. carboxylate, being ca. 20-40 times more potent than unmodified slex. These findings should

be of importance for the design of new multivalent forms of sLex as well as sLex mimetics as high-affinity selectin ligands.

IT 211746-89-3P 211746-90-6P 211746-91-7P

211746-92-8P 211746-93-9P 211746-94-0P

211746-96-2P 211746-97-3P

RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); SPN

(Synthetic preparation); BIOL (Biological study); PREP (Preparation) (Chemoenzymic synthesis and E- and P-selectin inhibitory activity of bivalent sialyl Lewis x derivs.)

211746-89-3 CAPLUS

CN 3,6,9,12-Tetraoxatetradecanediamide,

N,N'-bis[2-[[6-[[0-(N-acetyl- $\alpha$ -neuraminosyl)-(2 $\rightarrow$ 3)-0- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 4)-0-[6-deoxy- $\alpha$ -L-galactopyranosyl-(1 $\rightarrow$ 3)]-2-(acetyl- $\beta$ -deoxy- $\beta$ -D-glucopyranosyl-( $\alpha$ -)-1

oxohexvl]amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

PAGE 1-B

PAGE 2-C

RN 211746-90-6 CAPLUS CN 3,6,9,12-Tetraoxa-1

3,6,9,12-Tetraoxa-15,18-diazatetracosanoic acid, 24-[[O-(N-acety1- $\alpha$ -neuraminosy1)-(2+3)-O- $\beta$ -D-galactopyranosy1-(1+4)-O-[ $\delta$ -deoxy- $\alpha$ -L-galactopyranosy1-(1-3)]-2-(acety1amino)-2-deoxy- $\beta$ -D-glucopyranosy1]oxy]- (9CI) (CA INDEX NAME)

RN 211746-91-7 CAPLUS

CN 3,6,9,12,15-Pentaoxaheptadecanediamide, N,N'-bis[2-[[6-[[0-(N-acety]-α-neuraminosyl]-(2-3)-0-β-D-galactopyranosyl-(1-4)-0-[6-deoxy-α-L-galactopyranosyl-(1-3)]-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl]oxyl-1-oxohexyl]amino]-byl-[0-(5] (CA INDEX NAME)

PAGE 1-C

RN 211746-92-8 CAPLUS

CN 3,6,9,12,15-Pentaoxa-18,21-diazaheptacosanoic acid, 27-[[O-(N-acety1-α-neuraminosy1)-(2-3)-O-β-Dgalactopyranosy1-(1-4)-O-[6-deoxy-α-L-galactopyranosy1(1 $\rightarrow$ 3)]-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl]oxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 211746-93-9 CAPLUS

CN 3,6,9,12,15,18-Hexaoxaeicosanediamide,
N,N'-bis[2-[[6-[(]0-(N-acetyl-α-neuraminosyl)-(2-3)-0-β-Dgalactopyranosyl-(1-4)-0-[6-deoxy-α-L-galactopyranosyl(1-3)]-2-(acetylamino)-2-deoxy-B-D-glucopyranosyl)oxyl-1oxohexyl]amino]ethyl-1 (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 2-C

RN 211746-94-0 CAPLUS CN 3,6,9,12,15,18-Hexa

3,6,9,12,15,18-Hexaoxa-21,24-diazatriacontanoic acid, 30-[[O-(N-acety]- $\alpha$ -neuraminosyl)-(2+3)-O- $\beta$ -p-galactopyranosyl-(1+4)-O-( $\beta$ -deoxy- $\alpha$ -L-galactopyranosyl-(1-3)]-Z-(acety]amino)-Z-deoxy-Z-D-glucopyranosyl)-(9C1) (CA INDEX NAME)

PAGE 1-B

PAGE 1-C

- CO2H

RN

<sup>211746-96-2</sup> CAPLUS 3,6,9,12,15,18,21-Heptaoxatricosanediamide, CN N, N'-bis[2-[[6-[[O-(N-acetyl- $\alpha$ -neuraminosyl)-(2 $\rightarrow$ 3)-O- $\beta$ -D-

Absolute stereochemistry.

- RN 211746-97-3 CAPLUS
- CN 3,6,9,12,15,18,21-Heptaoxa-24,27-diazatritriacontanoic acid, 33-[[0-(N-acetyl-α-neuraminosyl)-(2-3)-0-PD-galactopyranosyl-(1-4)-0-[6-deoxy-α-L-galactopyranosyl-(1-4)-0-(3-

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B



OS.CITING REF COUNT: 32 THERE ARE 32 CAPLUS RECORDS THAT CITE THIS

RECORD (33 CITINGS)
REFERENCE COUNT: 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:575490 CAPLUS DOCUMENT NUMBER: 127:216547

ORIGINAL REFERENCE NO.: 127:42045a,42048a
TITLE: Formation of Microscale Gradients of Protein Using

Heterobifunctional Photolinkers

AUTHOR(S): Hypolite, Claire L.; McLernon, Terri L.; Adams, Derek N.; Chapman, Kenneth E.; Herbert, Curtis B.; Huang, C.

C.; Distefano, Mark D.; Hu, Wei-Shou

CORPORATE SOURCE: Department of Chemical Engineering and Materials

Science, University of Minnesota, Minneapolis, MN,

55455-0132, USA

SOURCE: Bioconjugate Chemistry (1997), 8(5), 658-663

CODEN: BCCHES; ISSN: 1043-1802

PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 127:216547

Gradients of biol. mols. on a microscale have been postulated to elicit cellular responses, such as migration. However, it has been difficult to prepare such gradients for exptl. testing. A means for producing such gradients has been developed using a heterobifunctional photolinking agent with laser light activation. The photolinking agent synthesized includes an N-hydroxysuccinimide group and a photoreactive benzophenone (BP) separated by a tetraethylene glycol (TEG) spacer. The presence of the tetraethylene glycol spacer renders the photolinker hydrophilic, a desirable trait for conjugation in aqueous solns. The linker was then conjugated to R-phycoerythrin (R-PE), a fluorescent protein. The resulting photolinker-R-phycoerythrin conjugate (BP-TEG-PE) was then immobilized onto a polystyrene surface by laser irradiation on a motorized stage. By varying exposure time of the sample to the beam, the amount of BP-TEG-PE immobilized on the surface was changed over an order of magnitude over a distance of 250 µm. This method can be applied to prepare gradients of proteins that elicit biol, responses, such as extracellular matrix proteins or growth factors, and to study the biol. effects of such gradients.

IT 195071-53-5P 195071-55-7DP, reaction products with phycoerythrin

RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PRP (Synthetic preparation); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)

(formation of microscale gradients of protein using heterobifunctional photolinkers)

RN 195071-53-5 CAPLUS CN Acetic acid, 2-[[13-(4-benzoylphenyl)-13-oxo-3,6,9-trioxa-12-azatridec-1yl]oxy]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

PAGE 1-A

Ö

CH<sub>2</sub> CH<sub>2</sub>

PAGE 2-A

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CH<sub>2</sub>

CH<sub>2</sub> Ö

CH<sub>2</sub>

CH<sub>2</sub>

ò CH<sub>2</sub>

c=0 Ö

- RN 195071-55-7 CAPLUS
- CN 3,6,9,12-Tetraoxatetradecanamide, 14-[(4-benzoylbenzoyl)amino]- (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

IT 195071-49-9P 195071-51-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(formation of microscale gradients of protein using heterobifunctional photolinkers)

RN 195071-49-9 CAPLUS

CN Acetic acid, 2-[2-[2-(2-aminoethoxy)ethoxy]ethoxy]- (CA INDEX NAME)

- RN 195071-51-3 CAPLUS
- CN Acetic acid, 2-[[13-(4-benzoylpheny1)-13-oxo-3,6,9-trioxa-12-azatridec-1y1]oxy]- (CA INDEX NAME)

## - O- CH2-CO2H

OS.CITING REF COUNT: 58 THERE ARE 58 CAPLUS RECORDS THAT CITE THIS

RECORD (58 CITINGS)

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:516284 CAPLUS DOCUMENT NUMBER: 125:247294

ORIGINAL REFERENCE NO.: 125:46221a,46224a

TITLE: Syntheses of ligands containing two and three 2,2'-(bisamino)diphenyl ether units designed for

molecular self-assembly on lithiation

AUTHOR(S): Ashton, Peter R.; Hoerner, Bernd; Kocian, Oldrich; Menzer, Stephan; White, Andrew J. P.; Stoddart, J.

Fraser; Williams, David J.

CORPORATE SOURCE: School Chem., Univ. Birmingham, Birmingham, B15 2TT,

SOURCE: Synthesis (1996), (8), 930-940

PUBLISHER: CODEN: SYNTBF; ISSN: 0039-7881
Thieme
DOCUMENT TYPE: Journal

DOCUMENT TYPE: Journal LANGUAGE: English

AB The syntheses of polyamines containing 2-3 2,2'-(bisamino)diphenyl ether units linked together, designed for self-assembly following lithiation, are

reported. The x-ray crystal structures of 2 of the bis[2,2-(bisamino)diphenyl ethers] are described. The ligand, which is

linked by an ethylene glycol spacer, exhibits a coiled

conformation by intramol. H bonds and supplemented by  $[CH-\pi]$ 

interactions. The ligand, which is linked by a more rigid bridge, containing a paraphenylene unit, displays a stretched conformation stabilized by intramol. edge to face interactions.

T 181725-32-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of ligands with (bisamino)diphenvl ether units)

RN 181725-32-6 CAPLUS

CN 3,6,9,12-Tetraoxatetradecanediamide.

N1, N14-bis[2-[2-[(2-methoxyacetyl)amino]phenoxy]phenyl]- (CA INDEX NAME)

THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD

OS.CITING REF COUNT:

8 (8 CITINGS)

L6 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2009 ACS on SIN

ACCESSION NUMBER: 1994:551679 CAPLUS DOCUMENT NUMBER: 121:151679

ORIGINAL REFERENCE NO.: 121:27289a,27292a

TITLE: On the lipid head group hydration of floating surface monolayers bound to self-assembled molecular protein

lavers

AUTHOR(S): Loesche, Mathias; Erdelen, Christian; Rump, Elmar; Ringsdorf, Helmut; Kjaer, Kristian; Vaknin, David

CORPORATE SOURCE: Institute of Physical Chemistry,

Johannes-Gutenberg-Universitaet Mainz, Mainz, D-55099,

Germany

SOURCE: Thin Solid Films (1994), 242(1-2), 112-17

CODEN: THSFAP: ISSN: 0040-6090 Journal DOCUMENT TYPE:

LANGUAGE: English

The structure of monomol. layers of the protein streptavidin, specifically bound to biotin-functionalized lipid monolayers at aqueous surfaces, has been characterized. Neutron and x-ray reflectivity measurements allowed an assessment of the organization of these self-assembled systems with mol. resolution Emphasis here is placed on the hydration of the lipid head groups in the bound state. For three functionalized lipids with spacers of different lengths between the biotin and their chains it was observed that the head groups were dehydrated in monolayers of the pure lipids, which were kept at low surface pressure before protein adsorption. The introduction of dipole moments at the interface by the admixt. of phospholipids or the application of lateral pressure on the lipid monolayer before protein adsorption were found to impose an extension of the spacer moieties. The biotin groups were thus presented further away from the interface, and a hydration layer between the protein and the functionalized interface was observed in the self-assembled supramol. structures.

157300-02-2D, complexes with streptavidin

RL: BIOL (Biological study) (membrane monolayer, lipid head group hydration in)

RN 157300-02-2 CAPLUS

CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,

hexahvdro-N-(24-octadecv1-23-oxo-3,6,9,12,15,18,21-heptaoxa-24azadotetracont-1-yl)-2-oxo-, [3aS-(3a $\alpha$ , 4 $\beta$ , 6a $\alpha$ )]- (9CI)

(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

ANSWER 8 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN 1993:656373 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER: 119:256373

ORIGINAL REFERENCE NO.: 119:45621a,45624a TITLE:

Preparation and characterization of conjugates of monoclonal antibodies and staphylococcal enterotoxin A using a new hydrophilic crosslinker

Aakerblom, Eva; Dohlsten, Mikael; Brynoe, Charlotte; AUTHOR(S): Mastej, Maria; Steringer, Ingrid; Hedlund, Gunnar;

Lando, Peter; Kalland, Terje CORPORATE SOURCE: Kabi Pharm. AB, Uppsala, S-751 82, Swed.

SOURCE: Bioconjugate Chemistry (1993), 4(6), 455-66

CODEN: BCCHES; ISSN: 1043-1802 DOCUMENT TYPE: Journal

LANGUAGE: English

Conjugates between monoclonal antibodies recognizing human cancer cells and the superantigen staphylococcal enterotoxin A (mAb-SEA) represent a potential novel approach to tumor therapy. Such mAb-SEA conjugates direct T-cells to lyse colon carcinoma cells in vitro. The synthesis of mAb-SEA conjugates which were prepared by introducing thiol groups on SEA and iodoacetyl or maleimide groups on mAb forming a stable thioether linkage between SEA and mAb is described. A hydrophilic spacer, composed of repeated ethylene oxide units, was constructed to increase the distance between SEA and mAb, preserving biol. activity of both proteins. The degree of modification of mAb with rSEA was determined with SDS-PAGE. Variables influencing the composition of the conjugates and their effect on the tumor-cell cytotoxicity were studied and optimal conditions for the synthesis were established. Functionally active mAb-SEA conjugates were prepared from a panel of different mAb and T-cell-dependent cytotoxicity against several human cancer types including colon, ovarial, breast, and renal cancer was obtained. Thus, mAb-SEA conjugates may be of value of the treatment of human neoplastic disease.

141282-23-7

RL: RCT (Reactant); RACT (Reactant or reagent) (hydrolysis of)

141282-23-7 CAPLUS RN

CN 3,6,9,12,15-Pentaoxaheptadecanoic acid, 17-amino-, 1-methylethyl ester (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

- CH2- CH2- NH2

- IT 141282-33-9DP, reaction products with crosslinked Staphylococcal enterotoxin A derivs. 141282-38-4DP, reaction products with crosslinked monoclonal antibody derivs. 151225-48-8DP, reaction products with crosslinked Staphylococcal enterotoxin A derivs. RL: PRR (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and characterization of)
- RN 141282-33-9 CAPLUS
- CN Acetic acid, 2-[(17-iodo-16-oxo-3,6,9,12-tetraoxa-15-azaheptadec-1-yl)oxy], 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

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RN 141282-38-4 CAPLUS

CN Acetic acid, 2-[[16-oxo-18-(2-pyridinyldithio)-3,6,9,12-tetraoxa-15azaoctadec-1-yl]oxy]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

RN 151225-48-8 CAPLUS

CN 3,6,9,12,15-Pentaoxa-18-azaheneicosanoic acid, 21-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-y1)-19-oxo-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

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PAGE 1-B

IT 141282-34-0P 141282-37-3P 151225-46-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and esterification with hydroxysuccinimide)

RN 141282-34-0 CAPLUS

CN Acetic acid, 2-[(17-iodo-16-oxo-3,6,9,12-tetraoxa-15-azaheptadec-1-y1)oxy](CA INDEX NAME)

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RN 141282-37-3 CAPLUS

CN Acetic acid, 2-[[16-oxo-18-(2-pyridinyldithio)-3,6,9,12-tetraoxa-15-

azaoctadec-1-y1]oxy]- (CA INDEX NAME)

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RN 151225-46-6 CAPLUS

CN 3,6,9,12,15-Pentaoxa-18-azaheneicosanoic acid, 21-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-19-oxo- (CA INDEX NAME)

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- IT 151225-47-7P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
- (preparation and reaction with succinimidyl alkanoate derivs.)
- RN 151225-47-7 CAPLUS
- CN Acetic acid, 2-[(14-amino-3,6,9,12-tetraoxatetradec-1-yl)oxy]-, hydrochloride (1:1) (CA INDEX NAME)

- CH2-CO2H

RN 141282-33-9 CAPLUS

CN Acetic acid, 2-[(17-iodo-16-oxo-3,6,9,12-tetraoxa-15-azaheptadec-1-y1)oxy], 2.5-dioxo-1-pvrrolidinvl ester (CA INDEX NAME)

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- O- CH2- CH2- NH- C- CH2I

RN 141282-38-4 CAPLUS

CN Acetic acid, 2-[[16-oxo-18-(2-pyridinyldithio)-3,6,9,12-tetraoxa-15azaoctadec-1-yl]oxy]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

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RN 151225-48-8 CAPLUS

N 3,6,9,12,15-Pentaoxa-18-azaheneicosanoic acid, 21-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-19-oxo-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

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PAGE 1-B

L6 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1991:143917 CAPLUS DOCUMENT NUMBER: 114:143917

ORIGINAL REFERENCE NO.:

114:24441a,24444a TITLE:

Preparation of cobalamin acid hydrazides and their

conjugates for immunological analysis INVENTOR(S):

Huber, Erasmus; Dieckhoff, Josef; Klein, Christian;

Kuerzinger, Konrad

PATENT ASSIGNEE(S): Boehringer Mannheim G.m.b.H., Germany

SOURCE: Ger. Offen., 12 pp. CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3900648	A1	19900712	DE 1989-3900648	19890111
US 5171679	A	19921215	US 1990-461215	19900105
EP 378203	A2	19900718	EP 1990-100462	19900103
			EP 1990-100462	19900110
EP 378203	A3	19921014		
EP 378203	B1	19960828		
R: AT, BE, CH,	DE, DK	, ES, FR, GB	, GR, IT, LI, LU, NL	
AT 141926	T	19960915	AT 1990-100462	19900110
JP 02233693	A	19900917	JP 1990-2635	19900111
JP 07017672	В	19950301		
PRIORITY APPLN. INFO.:			DE 1989-3900648 A	19890111
OTUED COMPORT(C).	CASREA	CT 114.14391	7. MADDAT 114.143917	

CASREACT 114:143917; MARPAT 114:143917 Stable B-CONHNH(X-CONHNH)x-H (B = cobalamin residue minus one CONH2 group; X = spacer; x = 0, 1), whose conjugates with enzymes are useful

for immunol, anal., especially in immunoassays for the determination of cvanocobalamin,

were prepared Cyanocobalamin-8-acid in DMF-H2O was treated with N-hydroxysuccinimide and NaCN, the solution was adjusted to pH 5.5 with NaOH, N-ethyl-N'-[3-(dimethylamino)propyl]carbodiimide-HCl and H2NNHCOCH2(OCH2CH2)3OCH2ONHNH2-HCl were added, and the reaction mixture was

allowed to react to give cyanocobalamin-8-acid N'-[[2-[2-[2-(hydrazinocarbonylmethoxy]ethoxy]ethoxy]acetyl]hydrazi de. A conjugate of this with horseradish peroxidase was more effective

and simpler to use for the immunoassay of vitamin B12 than the known

132684-10-7P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and condensation of, with cobalamin derivative) RN 132684-10-7 CAPLUS 3,6,9,12-Tetraoxatetradecanedioic acid, 1,14-dihydrazide, hydrochloride (1:2) (CA INDEX NAME) PAGE 1-A 0 HoN-NH-C-CHo-O-CHo-CHo-O-CHo-O-CHo-O-CHo-O-CHo-O-CHo-O-CHo-C-NH-2 HC1 PAGE 1-B - NH 2 132684-08-3P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and deprotection of, in preparation of cobalamin conjugate) 132684-08-3 CAPLUS RN CN 6,9,12,15-Tetraoxa-2,3,18,19-tetraazaeicosanedioic acid, 4,17-dioxo-, 1,20-bis(1,1-dimethylethyl) ester (CA INDEX NAME) PAGE 1-A t-BuO-C-NH-NH-C-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-PAGE 1-B - CH2- C- NH- NH- C- OBu-t

cyanocobalamin-8-acid-horseradish peroxidase conjugate.

- IT 132550-07-3DP, peroxidase conjugate 132550-07-3P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, for immunoassay of cyanocobalamins)
- RN 132550-07-3 CAPLUS
- CN Cobinamide, Co-(17-hydrazino-1,4,17-trioxo-6,9,12,15-tetraoxa-2,3-diazaheptadec-1-yl)-, dihydrogen phosphate (ester), inner salt, 3'-ester with (5,6-dimethyl-1-α-D-ribofuranosyl-1H-benzimidazole-κN3) (9CI) (CA INDEX NAME)

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ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 132550-07-3 CAPLUS

CN Cobinamide, Co-(17-hydrazino-1,4,17-trioxo-6,9,12,15-tetraoxa-2,3-diazaheptadec-1-yl)-, dihydrogen phosphate (ester), inner salt, 3'-ester with (5,6-dimethyl-1-a-D-ribofuranosyl-1H-benzimidazole-kN3) (SCI) (CA INDEX NAME)

PAGE 2-B

$$\begin{array}{c} -\operatorname{CH}_2 - \operatorname{CH}_2 - \operatorname{O} - \operatorname{CH}_2 - \operatorname{CH}_2 - \operatorname{O} - \operatorname{CH}_2 - \operatorname{C} - \operatorname{N} - \operatorname{NH}_2 \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & | \\ | & |$$

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)